



REPORT

ON THE

Health of the County Borough of Bootle
for the Year Ended Dec. 31st, 1910,

BY

WILLIAM DALEY,

L.R.C.P. (EDIN.), D.P.H. (LOND.),

Medical Officer of Health of the Borough,

Medical Superintendent of the Infectious Diseases Hospital,

Medical Officer of Schools.



BOOTLE :

BOOTLE TIMES, LIMITED, 30, ORIEL ROAD.

1911.

HEALTH COMMITTEE

OF THE

BOOTLE TOWN COUNCIL,

1910-1911.

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*MR. ALDERMAN WILD, M.D., J.P., Deputy-Chairman.

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and

HIS WORSHIP THE MAYOR (MR. COUNCILLOR BARBOUR).

* *Members of the Hospital Sub-Committee.*

Officials of the Public Health Department.

Medical Officer of Health :

WM. DALEY, L.R.C.P. (Edin.), D.P.H., (Lond.)

Assistant Inspector of Nuisances, Inspector under the Sale of Food and Drugs Acts,
and the Housing, Town Planning, &c., Act, 1909.

*R. J. McCULLOCH.

Sanitary Staff :

*H. V. SMITH.

J. LOBB (Disinfecting Workman).

H. OWENS.

J. WALL „ „

Clerical Staff :

R. MORLEY.

MISS B. WILSON.

Lady Sanitary Inspector and Inspector under the Midwives Act :

*MISS ADA STOTT.

Lady Health Visitor :

*MRS. MCKOWEN.

*Those marked * are Certified Inspectors.*

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HEALTH DEPARTMENT,

TOWN HALL,

March 6th, 1911.

*To the Chairman and Members of the
Health Committee.*

GENTLEMEN,

I have pleasure in presenting my Annual Report for the year 1910.

It will be seen that the Birth Rate is continuously declining, the average for the past ten years being 31·6 per 1,000 of the population, whereas last year it had fallen to 28 per 1,000.

Against this must be placed the great reduction in the number of deaths during the year. Although the Birth Rate is the lowest ever recorded, the natural increase of the population is more satisfactory than in any previous year, excepting 1907, there being 997 more births than deaths notified during the last twelve months.

The Death Rate was only 14·1 per 1,000 of the population, this being 4 per 1,000 below the average for the past ten years.

Knowsley Ward bears the unenviable distinction of having the highest general death rate of any of the Wards (15·7 per 1,000).

With regard to Infantile Mortality, Mersey Ward still holds the record, there being 185 deaths of infants under the age of one year to every 1,000 births in that Ward, although the corresponding rate for the whole Borough was only 123.

High rates of infantile mortality usually accompany high birth rates. This, however, does not apply to Mersey Ward, where the birth rate was only 23 per 1,000 of the population, and was next to the lowest of any of the Wards.

On page 19 of the Annual Report for the year 1908, I gave a summary of the causes which, in my opinion, contribute to the excessively high rate of mortality amongst the infant population of Mersey Ward. The conditions mentioned in that Report still exist, and deserve the serious consideration of the Council.

132 Deaths occurred from the principal Zymotic diseases corresponding to a rate of 1·8 per 1,000 of the population. This rate is low when compared with the yearly average of 2·8 per 1,000 for the previous 13 years.

I desire to draw special attention to that portion of the report dealing with sub-let houses, believing as I do that if the housing conditions mentioned therein were rectified on the lines indicated, a great measure of sanitary reform would be accomplished.

I am, Gentlemen,

Your obedient servant,

Wm Daley.

Medical Officer of Health.

STATISTICAL SUMMARY FOR 1910.

Area in Acres	...	...	...	...	...	...	1,946
Estimated Population, June, 1910	...	...	..				72,000
Population per Acre (excluding Dock Estate)	...	...					44·7
No. of Houses in Borough...	...	...	...	...			13,810
Number of persons per house at time of last census	..						5·8
Birth Rate per 1,000 living	...	...	...	...			28·0
Death Rate	„	„	...	...	...	...	14·1
Infantile Mortality per 1,000 births	...	...	..				123
Percentage of Uncertified deaths	...	...	...	...			3·4
Total deaths from Diarrhœa	...	...	...	...			64
Diarrhœa Mortality per 1,000 births	...	...	...				31
Death Rate from Phthisis per 1,000 living	...	...					1·1
Death Rate from Diseases of the Respiratory Tract per 1,000 living	...	...	...	..	...	...	2·9

BOROUGH OF BOOTLE.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

POPULATION.

The population estimated to the middle of the year 1910 was 72,000.

The census returns show the number of inhabitants in the year 1881 to have been 27,374 ; in 1891, 49,217 ; and in 1901, 58,556.

Approximate population of the Borough at the undermentioned age periods on an estimated population of 72,000 :—

Under 1 year	...	..	...	..	1,994	
1 year and under 5	...	...	...	...	6,889	
Total under 5	...	...	...	...	————	8,883
5 years and under 15	...	...	...	...	...	15,543
15 „ „ „ 25	...	...	...	...	...	14,717
25 „ „ „ 45	...	...	...	...	...	20,605
45 „ „ „ 65	...	...	...	...	...	10,376
65 „ „ upwards	...	...	...	...	...	1,876
						————
						72,000
						————

The following table gives the area of each ward and the estimated population :—

Ward	Area including Dock Estate.		Area exeluding Dock Estate.		Population.		Persons per area exeluding Dock Estate.
Derby.	451 acres	...	451 acres	...	13,100	...	29·0
Stanley.....	235 „	...	235 „	...	12,160	...	51·7
Mersey	312 „	...	174 „	...	15,166	...	87·1
Knowsley	306 „	...	176 „	...	12,684	...	72·0
Linacre	272 „	...	203 „	...	14,788	...	72·8
Orrell	370 „	...	370 „	...	4,102	...	11·0
	<u>1,946</u>		<u>1,609</u>		<u>72,000</u>		

TABLE SHOWING NEW HOUSES ERECTED SINCE THE LAST CENSUS.

Year	Derby	Stanley	Mersey	Knowsley	Linacre	Orrell	Totals
April 1901 - April 1902 ...	110	—	8	—	169	—	287
„ 1902 — „ 1903 ...	126	28	—	—	85	—	239
„ 1903 — „ 1904 ...	91	28	—	30	132	—	281
„ 1904 — „ 1905 ...	135	76	—	1	143	—	355
„ 1905 — „ 1906 ...	278	52	—	—	214	—	544
„ 1906 — „ 1907 ...	190	25	—	—	110	* 26	351
„ 1907 — „ 1908 ...	73	64	1	—	51	11	200
„ 1908 — Jan. 1909	46	52	—	—	14	21	133
Jan. 1909 — „ 1910 ..	44	44	—	1	10	1	100
„ 1910 — „ 1911 ...	7	15	—	—	6	11	39
	<u>1,100</u>	<u>384</u>	<u>9</u>	<u>32</u>	<u>934</u>	<u>70</u>	<u>2,529</u>

* Included in Borough for the first time.

The population per house at the last census was 5·8.

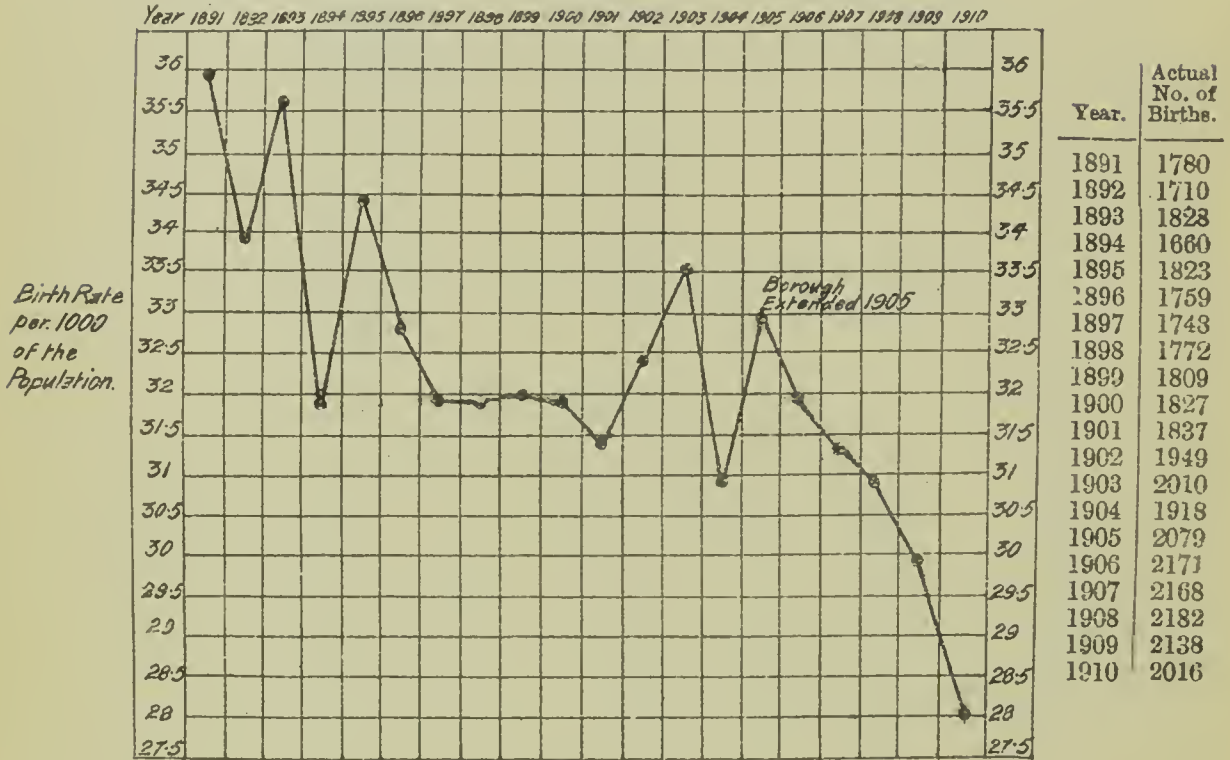
BIRTHS.

During the year 1910, 2,016 births were registered. Of these 992 were males and 1,024 were females. The birth rate per 1,000 of the population is therefore 28·0 ; the average of the previous 10 years being 31·6.

The rate for the whole of England and Wales during 1910 was 24·8 per 1,000, i.e., 3·2 per 1,000 lower than that of Bootle.

The following chart shows at a glance the variations in the local Birth Rate during the past 20 years.

CHART SHEWING BIRTH RATE OF BOOTLE SINCE 1891.



It will be seen that the birth rate has shewn an almost continuous decline. In 1891, the rate was 35.9 per 1,000 of the population, whereas in 1910 it had fallen to 28.0 per 1,000.

In the following table the variations in the number of births, and in the birth rate per 1,000 of the estimated population in each Ward, are indicated :—

Ward	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total	Rate
Derby.....	115	115	101	107	441	33.6
Stanley	60	58	48	58	224	18.4
Mersey	81	83	104	82	350	23.0
Knowsley	101	99	84	78	365	28.7
Linacre	139	125	110	124	498	33.6
Orrell.....	32	41	28	37	138	33.6
Entire Borough	531	521	478	486	2,016	28.0

The illegitimate births recorded this year numbered 45, equal to 2·2 per cent. of the total births. In the previous year 30 illegitimate births were registered. Careful inquiries lead to the conclusion that, one effect of the Notification of Births Act, 1907, has been to secure more accurate information in this respect.

The natural increase of the population during the year 1910 is shewn in the following table :—

Ward	Births	Deaths	Excess of Births over Deaths.
Derby	441	196	245
Stanley	224	123	101
Mersey	350	237	113
Knowsley	365	200	165
Linares	498	223	275
Orrell	138	40	98
Entire Borough	<u>2,016</u>	<u>1,019</u>	<u>997</u>

With the exception of the year 1907 the excess of births over deaths was, in 1910, greater than at any other period since 1891, notwithstanding the decline in the Birth Rate.

NATURAL INCREASE OF THE POPULATION EACH YEAR FROM 1891 TO 1910.

1891	...	583	1901	...	783
1892	...	723	1902	...	787
1893	...	659	1903	...	871
1894	...	709	1904	...	739
1895	...	713	1905	...	941
1896	...	712	1906	...	962
1897	...	691	1907	...	1,040
1898	...	717	1908	...	957
1899	...	597	1909	...	990
1900	...	586	1910	...	997
		<u>6,690</u>			<u>9,067</u>

Average for 10 years = 669.

Average for 10 years = 906.

THE NOTIFICATION OF BIRTHS ACT, 1907, came into operation on the 7th January, 1908, and its objects are (in the words of the Local Government Board) "the giving of advice and instruction to those in charge of infants."

The number of births notified under the Act during the past year amounted to 83 per cent. of the total births registered with the local registrar.

This does not compare favourably with the first year's working, when 86 per cent. of the total births were notified.

	Year 1908.	Year 1909.	Year 1910.
Births notified by parents	155	58	37
,, ,, Medical Practitioners..	251	158	131
,, ,, Midwives	1,476	1,553	1,522
Births not notified under the Notification of Births Act, 1907	300	369	326
Totals ...	<u>2,182</u>	<u>2,138</u>	<u>2,016</u>

The early information so obtained, has proved of great value to the Health Department, and no doubt the lives of many children have been saved owing to the advice and instruction given by the Health Visitors to ignorant and inexperienced mothers as to the way in which infants should be cleansed, clothed and fed. In this connection alone 7,870 visits have been made by the Lady Inspectors during the year. Their efforts have been ably supplemented by the members of the Bootle Health Society and other voluntary workers, who took in hand a large number of the poorest cases, and provided food and clothing wherever this was found to be necessary and possible.

DEATHS.

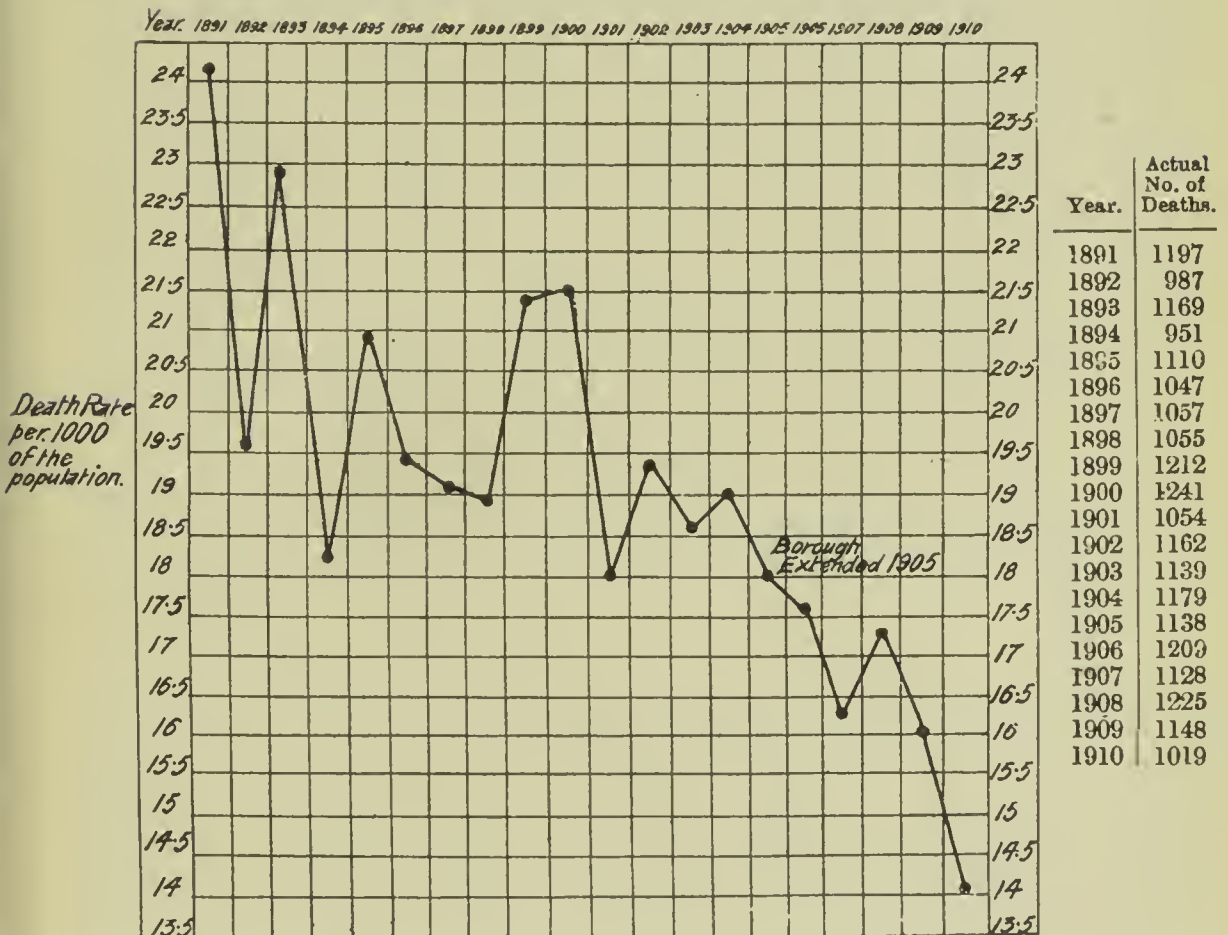
The total deaths registered as having occurred in Bootle during the year amounted to 872, giving a death rate of 12·1 per 1,000 of the population. This number includes 38 non-residents who died in public institutions in the Borough.

In order to arrive at the correct number of Bootle persons who died during the year, it is necessary to deduct these 38 deaths from the 872 and to add 152 deaths of persons, said to have been Bootle residents, who died in workhouses in Liverpool, together with 33 deaths of Bootle people dying in other public institutions outside Bootle.

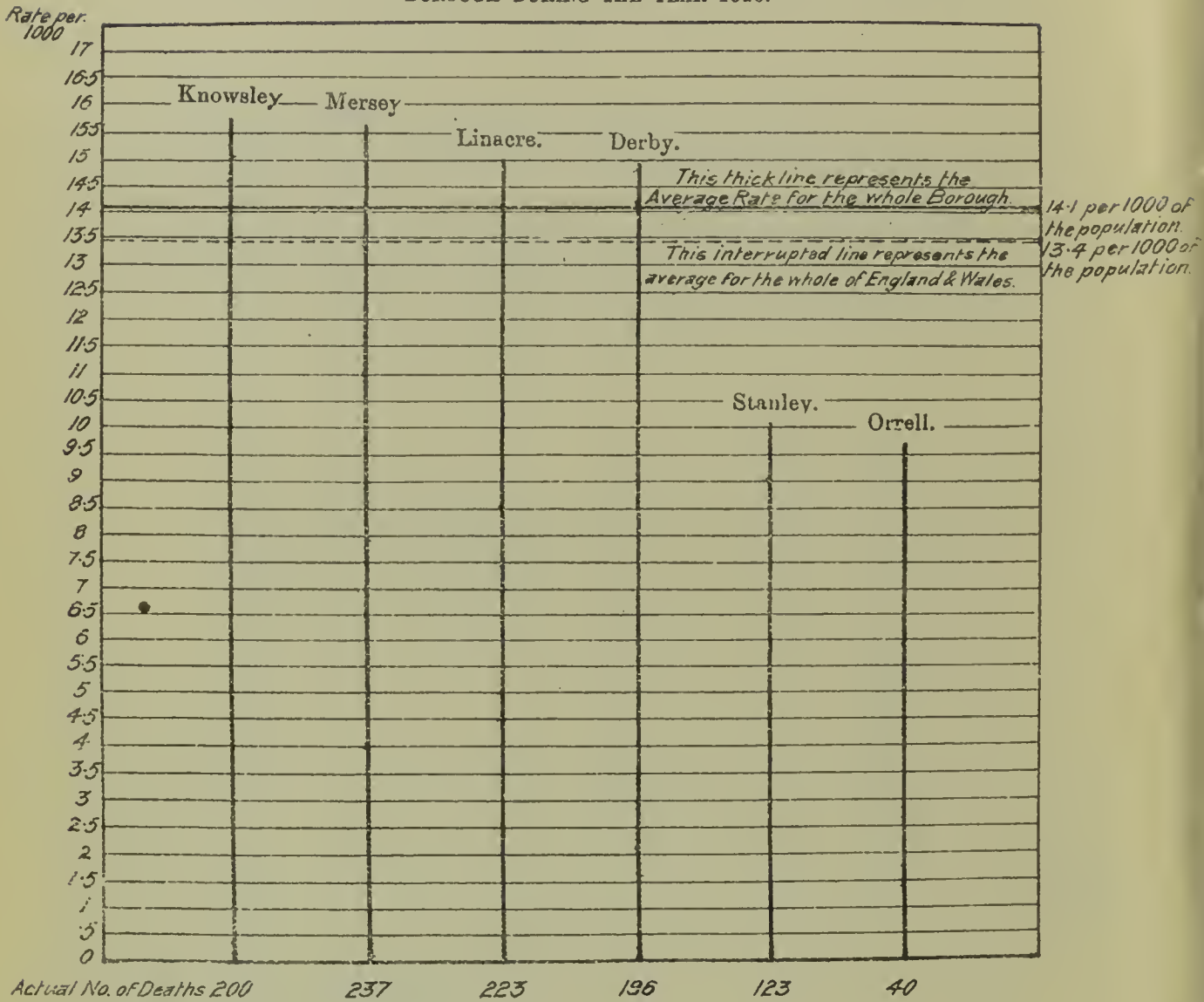
When these adjustments have been made, the total number of deaths assigned to Bootle is found to be 1,019, equal to a death rate of 14·1 per 1,000 of the population.

This rate is ·7 per 1,000 greater than that of England and Wales for the corresponding year, and is 4·0 per 1,000 less than the average local rate for the previous 10 years. It is the lowest on record for Bootle.

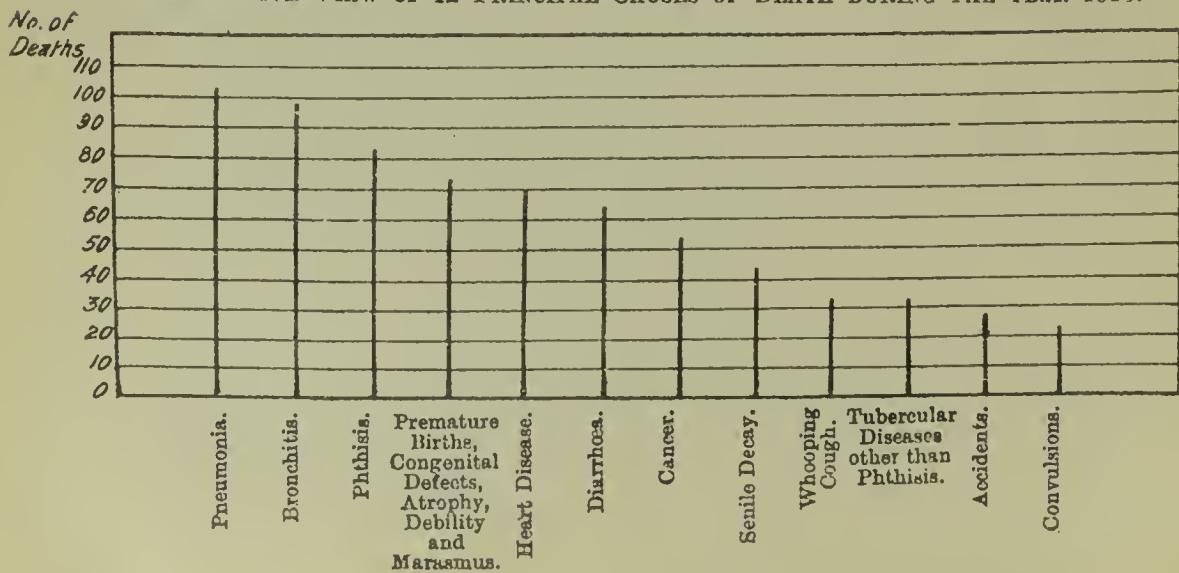
CHART SHEWING DEATH RATE OF BOOTLE SINCE 1891.



COMPARATIVE VIEW OF THE DEATH RATES IN THE DIFFERENT WARDS OF THE
BOROUGH DURING THE YEAR 1910.



COMPARATIVE VIEW OF 12 PRINCIPAL CAUSES OF DEATH DURING THE YEAR 1910.



MORTALITY IN RELATION TO SEASON.

The number of deaths in each quarter of the year, and the respective death rates for each ward during the year 1910 are shown in the following table :—

Ward.	1st Quarter.		2nd Quarter.		3rd Quarter.		4th Quarter.		Total.	Rate per 1,000	
Derby.....	51	...	46	...	41	...	58	...	196	...	14·9
Stanley	33	...	31	...	31	...	28	...	123	...	10·1
Mersey	55	...	45	...	75	...	62	...	237	...	15·6
Knowsley ...	51	...	42	...	59	...	48	...	200	...	15·7
Linacre	55	...	67	...	53	...	48	...	223	...	15·0
Orrell.....	13	...	12	...	9	...	6	...	40	...	9·7
Entire Borough	258	...	243	...	268	...	250	...	1,019	...	14·1

MORTALITY FROM BURNS AND SCALDS.

It is gratifying to be able to report a marked reduction in the number of deaths from burning and scalding during the year 1910.

DEATHS FROM BURNS AND SCALDS.

YEAR.	AGES.								Totals.
	Under 1 year.	1	2	3	4	5	6	7	
1901	...	...	...	...	1	2	2	...	5
1902	3	...	...	...	...	1	...	1	5
1903	...	...	1	1	1	1	...	2	6
1904	...	...	1	2	...	2	...	...	5
1905	...	...	1	2	...	2	1	1	7
1906	...	1	1	...	1	...	...	...	3
1907	...	5	2	2	1	1	2	1	14
1908	1	...	...	3	...	2	...	...	6
1909	...	...	2	2	2	3	...	...	9
1910	1	...	...	...	...	...	...	...	1
Totals ...	5	6	8	12	6	14	5	5	61

Section 15 of the Children Act of 1908 enacts that if any person over the age of sixteen years who has the custody, charge or care of any child under the age of seven years, allows that child to be in any room containing an open firegrate not sufficiently protected to guard against the risk of the child being burnt or scalded, without taking reasonable precautions against that risk, and by reason thereof the child is killed or suffers serious injury, he shall on summary conviction be liable to a fine not exceeding ten pounds.

Many poor persons were unable to purchase a fireguard and applied to the Health Department for assistance. These applicants were referred to the Bootle Health Society, the only organization in the Borough which takes such cases up, with the result that about 300 fireguards have been distributed. Many cases of burning have, no doubt, been prevented by the assistance rendered by the Society in providing fireguards.

INFANTILE MORTALITY.

There were 249 deaths of children under the age of one year, equal to an Infantile Mortality Rate of 123 per 1,000 births. This rate is 32 per 1,000 below the average for the previous 10 years.

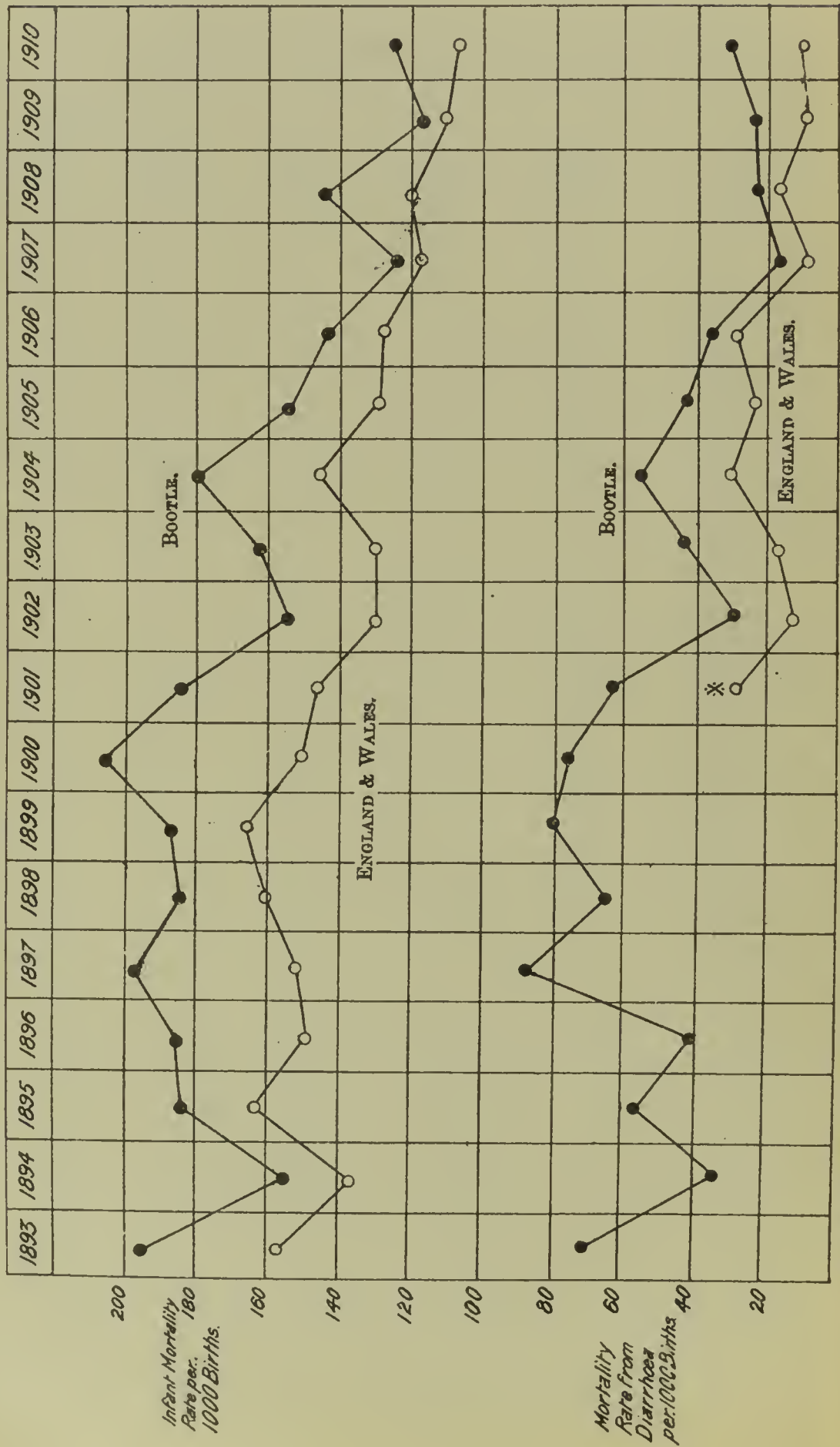
The rates per 1,000 births in the different Wards for the past 10 years are :—

			1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Derby	...	...	127	127	151	152	159	112	104	108	122	129
Stanley	...	...	127	113	197	162	148	129	64	111	108	80
Mersey	...	...	277	199	166	234	179	169	183	200	185	185
Knowsley	...		194	163	168	183	137	181	125	160	129	106
Linacre	...	...	145	150	136	158	146	140	113	132	85	106
Orrell	...	...	—	—	—	—	232	100	158	154	44	123

Table showing Infantile Mortality and deaths from Diarrhoea :—

Year		Infantile Deaths		Infantile Mortality Rate per 1,000 Births		Deaths from Diarrhoea		Mortality from Diarrhoea		
								Rate per 1,000 of the Population		Rate per 1,000 Births
1893	...	351	...	197	...	131	...	2·5	...	71
1894	...	262	...	157	...	45	...	·8	...	27
1895	...	335	...	183	...	107	...	2·0	...	58
1896	...	324	...	184	...	72	...	1·3	...	40
1897	...	349	...	199	...	153	...	2·8	...	87
1898	...	329	...	183	...	114	...	2·0	...	64
1899	...	337	...	186	...	146	...	2·6	...	80
1900	...	373	...	204	...	139	...	2·4	...	76
1901	...	337	...	183	...	113	...	1·9	...	61
1902	...	302	...	154	...	53	...	·8	...	27
1903	...	325	...	161	...	85	...	1·4	...	42
1904	...	346	...	180	...	109	...	1·7	...	56
1905	...	321	...	153	...	87	...	1·3	...	41
1906	...	312	...	143	...	83	...	1·2	...	38
1907	...	268	...	123	...	40	...	·5	...	18
1908	...	314	...	143	...	53	...	·7	...	24
1909	...	253	...	118	...	48	...	·6	...	22
1910	...	249	...	123	...	64	...	·8	...	31

CHART SHEWING THE INFANTILE MORTALITY RATE PER 1,000 BIRTHS AND THE MORTALITY RATE FROM DIARRHOEA PER 1,000 BIRTHS SINCE 1893, COMPARED WITH SIMILAR RATES FOR ENGLAND AND WALES.



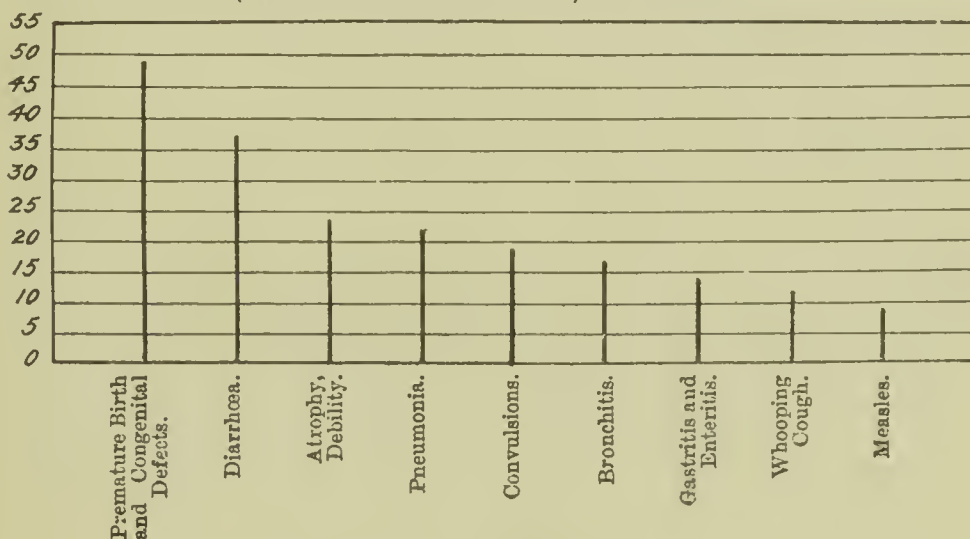
Actual No.
of deaths of
infants under
the age of
one year.

1893	351
1894	262
1895	335
1896	324
1897	349
1898	329
1899	337
1900	373
1901	387
1902	302
1903	325
1904	346
1905	311
1906	312
1907	263
1908	314
1909	253
1910	249

* Diarrhoea not separately classified until 1901 by Registrar-General.

The causes of infantile mortality and the ages at death are set out fully in table V. at the end of this report, while the relative importance of the various contributory causes is shown by the following diagram.

COMPARATIVE VIEW OF THE NINE PRINCIPAL CAUSES OF INFANTILE MORTALITY
(BELOW ONE YEAR OF AGE) DURING 1910.



Of the 249 deaths of infants, the lowest number on record for any year since 1893, 51 took place within a week of birth, and an additional 36 lived for less than a month.

Of the deaths at this early period of life, about 64 per cent. are due to a group of conditions—prematurity, congenital defects, injury at birth, want of breast milk, atrophy, debility and inanition. The majority of the deaths in this group are chiefly dependent on adverse anti-natal conditions. Preventive measures are therefore less easy to apply than those appropriate in the case of older infants.

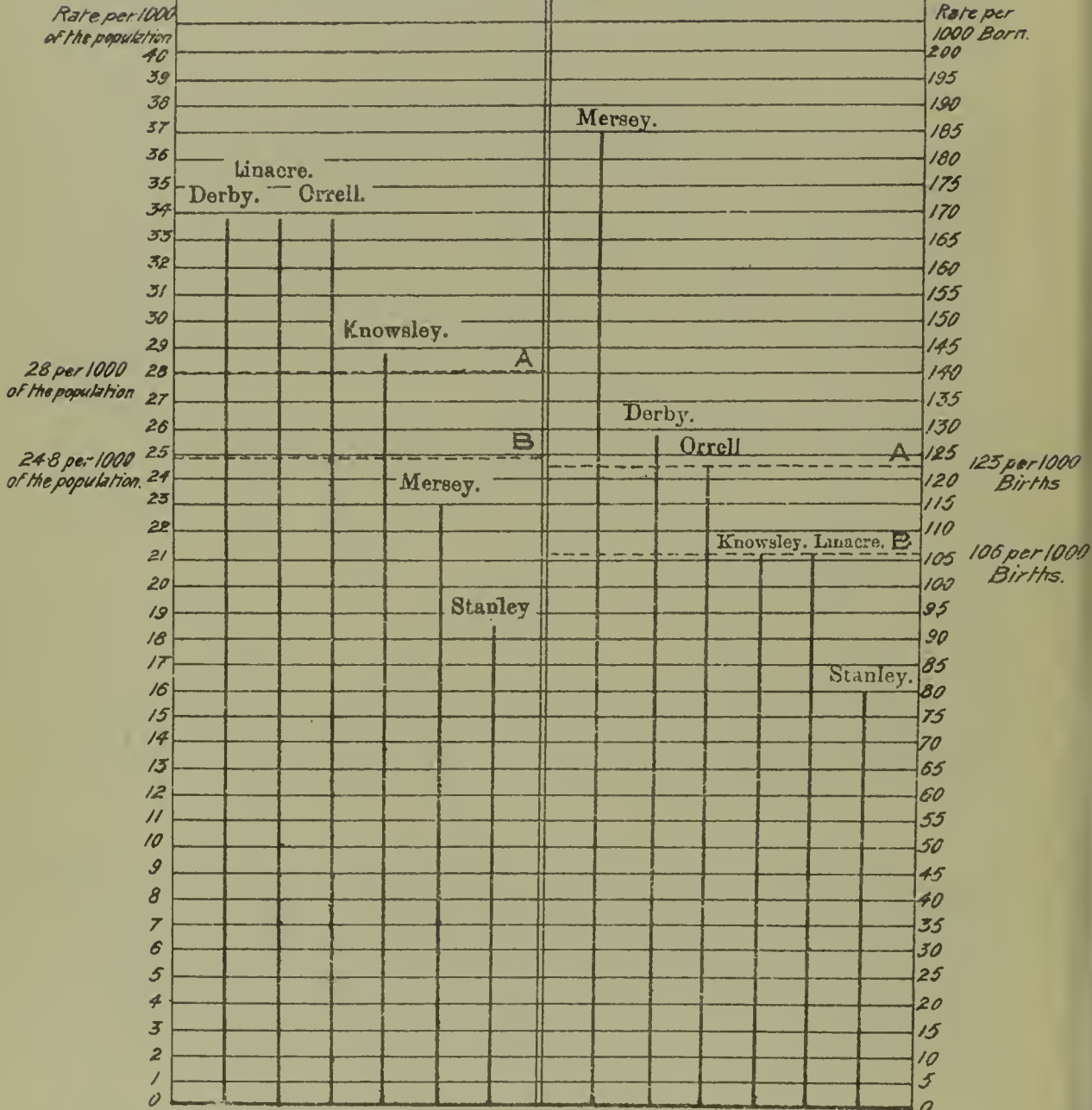
The following diagram shows for the year 1910 the birth rate and the rate of infantile mortality in each of the Wards compared with that for the whole Borough, and with that for England and Wales. It is a singular coincidence that the birth rates for Derby, Linacre and Orrell are the same, i.e., 33·6. The lowest death rate among the infant population, 80 per 1,000 births, occurred in Stanley Ward.

BIRTH RATES.

Comparative view of the Birth Rates per 1,000 of the population in the different Wards of the Borough during the year 1910.

INFANTILE MORTALITY.

Comparative view of the Infantile Mortality per 1,000 births in the different Wards of the Borough during the year 1910.



A—This interrupted line represents the average Birth Rate per 1,000 of the population in the whole Borough.

B—The corresponding rate for the whole of England and Wales.

A—This interrupted line represents the average rate of Infantile Mortality in the whole Borough per 1,000 Children born.

B—The corresponding rate for the whole of England and Wales.

ZYMOTIC DEATH RATE.

Table showing number of deaths from the principal Zymotic diseases since 1898 :—

	1898.	1899.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
Smallpox ...	—	—	—	—	4	6	—	—	—	—	—	—	—
Scarlet Fever...	10	10	17	16	14	25	13	32	14	7	17	16	6
Diphtheria ...	12	14	10	11	8	9	19	18	11	14	14	10	6
Measles ...	7	6	21	5	46	2	48	9	44	16	34	68	22
Whooping Cough	28	21	56	6	23	16	41	18	30	28	42	3	32
Enteric ...	17	10	16	12	13	12	3	4	7	8	5	2	2
Typhus ...	7	1	—	2	3	—	—	—	—	—	1	3	—
Diarrhœa ...	114	146	139	113	56	85	109	87	83	40	53	48	64
Totals...	195	208	259	165	167	155	230	168	189	113	166	150	132
Rate per 1,000 of the total population	3·6	3·8	4·5	2·8	2·7	2·5	3·7	2·6	2·7	1·6	2·3	2·1	1·8

The death rate from the above diseases during the years 1898 to 1909 averaged 2·8 per 1,000 of the population. The rate of 1·8 per 1,000 during 1910 shows a very considerable and distinct improvement.

Table showing number of notifications of Infectious Diseases since 1900 :—

	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.
<i>Population</i>	57,450.	58,556.	60,000.	60,800.	62,000.	63,134.	68,000.	69,200.	70,500.	71,500.	72,000
Smallpox ...	3	1	25	122	—	—	—	—	—	—	—
Scarlet Fever	270	285	321	353	269	289	338	257	498	397	288
Diphtheria, in- cluding Croup	24	64	34	33	48	78	74	52	68	64	54
Typhus Fever	—	12	15	—	—	—	—	—	1	2	—
Continued Fever	—	—	—	—	1	—	—	—	—	—	—
Enteric Fever	97	76	62	61	22	24	40	42	30	15	12
Puerperal Fever	2	6	1	—	—	—	6	4	8	4	2
Erysipelas	54	51	50	25	39	32	38	32	34	36	26
Phthisis ...	—	22	21	21	43	22	18	7	24	172	157

PREVALENCE OF INFECTIOUS DISEASES IN RELATION TO SEASON.

The following table shows the number of cases notified in each quarter of the year 1910 :—

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Totals.
Smallpox ...	—	—	—	—	—
Scarlet Fever...	73	70	83	62	288
Diphtheria ...	13	6	11	24	54
Enteric Fever	2	1	6	3	12
Continued Fever	—	—	—	—	—
Typhus Fever	—	—	—	—	—
Erysipelas ...	5	4	6	11	26
Puerperal Fever	1	—	—	1	2
Phthisis ...	39	42	40	36	157*
Totals	133	123	146	137	539

* 95 of the Phthisis cases were notified by the Poor Law Officers.

SMALLPOX.

This disease has been absent from the Borough since 1903, when 122 cases were notified.

A considerable number of Smallpox contacts were reported by the Port Sanitary Authority. These were carefully watched, and were all found to be in good health.

SCARLET FEVER.

The cases were distributed among the Wards as follows :—

	Derby.		Stanley.		Mersey.		Knowsley.		Linacre.		Orrell.
Cases notified	89	...	41	...	27	...	37	...	72	...	22
Cases removed to hospital...	61	...	30	...	14	...	23	...	60	...	13

Year	Cases Notified		Cases Notified per 1,000 of Population		Cases Removed		Percentage of Removals		Deaths		Percentage of Deaths to Notifications
1891.....	259	...	5·2	...	29	...	11	...	32	...	12·3
1892.....	289	...	5·7	...	47	...	16	...	32	...	11·0
1893.....	332	...	6·5	...	89	...	27	...	20	...	6·0
1894.....	638	...	12·2	...	195	...	30	...	36	...	5·6
1895.....	300	...	5·7	...	124	...	41	...	14	...	4·6
1896.....	297	...	5·5	...	124	...	41	...	20	...	6·7
1897.....	245	...	4·5	...	133	...	54	...	13	...	4·9
1898.....	263	...	4·8	...	162	...	61	...	10	...	3·8
1899.....	198	...	3·5	...	124	...	62	...	10	...	5·0
1900.....	270	...	4·7	...	170	...	62	...	17	...	6·2
1901.....	285	...	4·8	...	202	...	71	...	16	...	5·6
1902.....	321	...	5·4	...	259	...	80	...	14	...	4·3
1903.....	353	...	5·7	...	225	...	63	...	25	...	7·0
1904.....	269	...	4·3	...	210	...	78	...	13	...	4·8
1905.....	289	...	4·5	...	237	...	82	...	32	...	11·0
1906.....	338	...	4·9	...	270	...	79	...	14	...	4·1
1907.....	257	...	3·7	...	200	...	77	...	7	...	2·8
1908.....	498	...	7·0	...	314	...	63	...	17	...	3·4
1909.....	397	...	5·5	...	272	...	68	...	16	...	4·0
1910.....	288	...	4·0	...	201	...	69	...	6	...	2·0

During the past 20 years the average number of patients notified each year=319. The attack rate during the same period was 5·6 per 1,000 of the population per annum. 56 per cent. of those reported were removed to hospital.

The accompanying charts show that during the period under review Scarlet Fever was never absent from the Borough. Bootle, however, is not peculiar in this respect; the like experience obtains practically in all large towns, and this, notwithstanding the fact that Infectious Diseases Hospitals are mainly filled with patients suffering from Scarlet Fever. The great expense attached to the aggregation of these patients in hospital has not met with the success expected, seeing that the attack rate has not been reduced; the only gratifying feature being that the percentage of deaths to cases is much lower than formerly. This in its turn is partly owing to the type of the disease being milder during recent years, and to the fact that the more serious cases usually receive hospital treatment.

SCARLET FEVER.

Diagram shewing the number of Notifications per 1,000 of the population received each year since 1892. The darker shading corresponds to the number of deaths per 1,000 of the population during the same period.

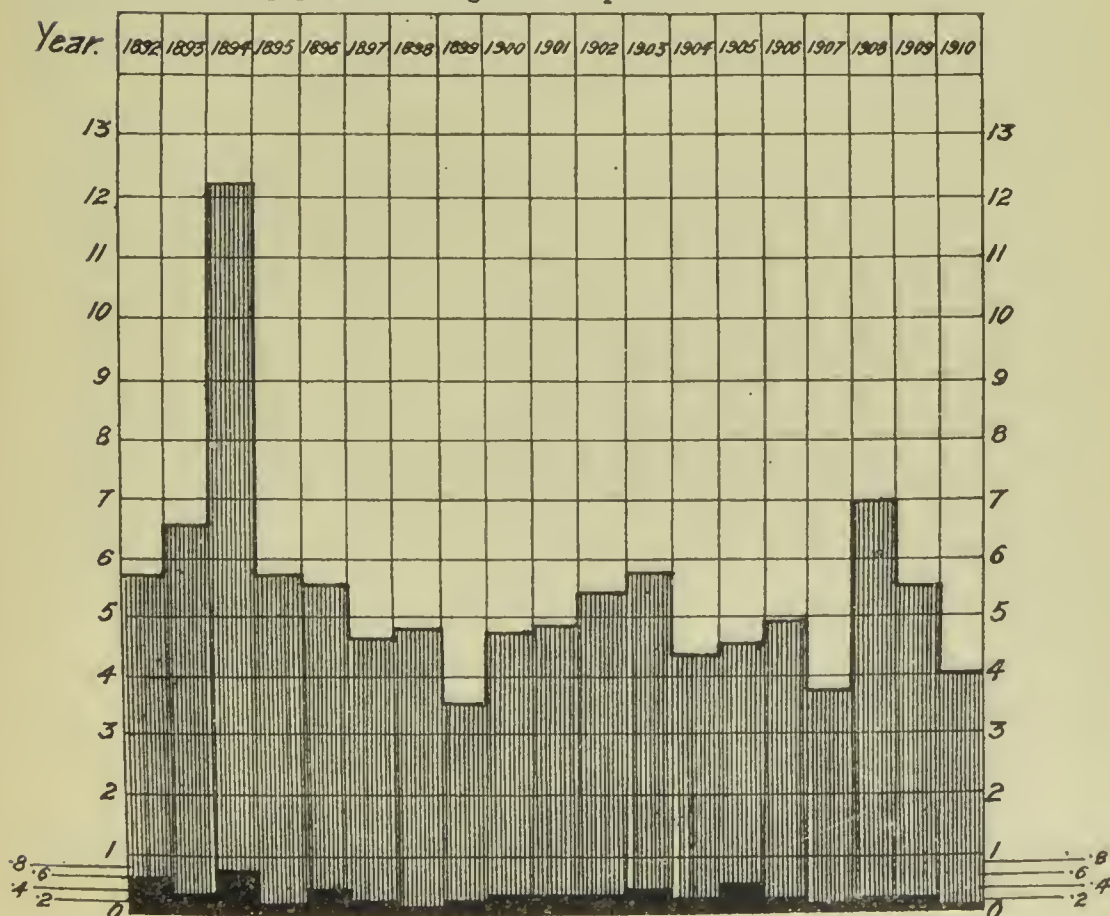
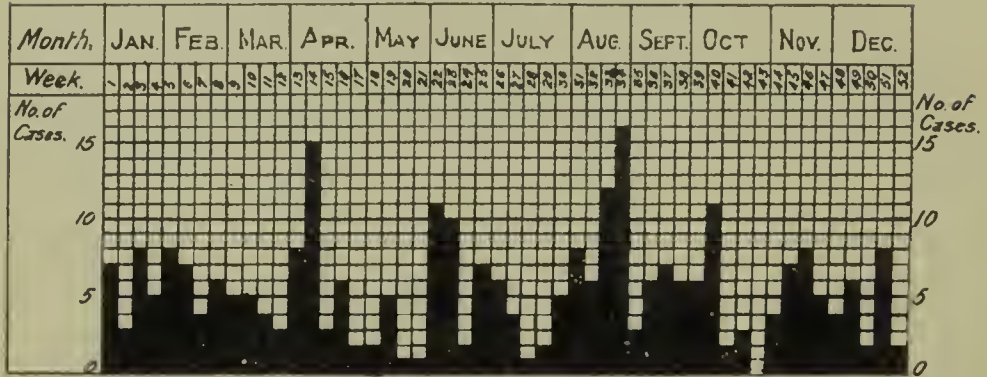


CHART SHEWING THE NUMBER OF SCARLET FEVER CASES REPORTED
EACH WEEK DURING THE YEAR 1910.



It will be seen from the following table which deals with the year 1910, that 162 or 56 per cent. of the notifications, referred to school children, and amongst these, only 2 deaths took place, giving a case mortality of 1·2 per cent. This rate can be considered comparatively low, and contrasts strikingly with the mortality in younger children not attending school. In the latter groups 93 cases were reported, 4 of whom died, giving a mortality of 4·3 per cent. of those attacked.

CHILDREN NOT ATTENDING SCHOOL.

Ages	0—1	1	2	3	4	5	6
Notified Cases	4	10	11	26	26	15	1
Deaths	...	1		2	1		

93 cases, 4 deaths.

SCHOOL CHILDREN.

Ages	3	4	5	6	7	8	9	10	11	12	13	14	15
Notified Cases	1	4	22	29	15	23	19	14	8	13	9	3	2
Deaths	...									1			1

162 cases, 2 deaths.

PERSONS ABOVE SCHOOL AGE.

Ages	14	15	16	17	18	19	23	24	25	28	30	32	33	34	35	39	40	43	54
Notified Cases	4	2	4	2	3	2	1	2	1	2	2	1	1	1	1	1	1	1	1

33 cases, No deaths.

Total Notified Cases, 288.

The greatest incidence of the disease occurred in children attending Christ Church Schools.

NUMBER OF SCARLATINA CASES REPORTED DURING THE YEAR 1910, AMONGST CHILDREN ATTENDING SCHOOLS, TOGETHER WITH THE ACCOMMODATION, THE AVERAGE NUMBER OF CHILDREN ON THE ROLLS, AND THE AVERAGE ATTENDANCE AT EACH SCHOOL.

School	Accommodation	Average number of children on rolls	Average Attendance	Number of cases reported during the				Totals for year	Attack Rate per 1,000 scholars on the rolls
				1st quar'r	2nd quar'r	3rd quar'r	4th quar'r		
Christ Church ...	741	828	758	—	3	11	14	28	3·3
Salisbury Road ...	1,385	1,472	1,326	11	2	3	4	20	1·3
Bedford Road ...	1,255	1,358	1,219	3	1	9	5	18	1·3
Hawthorne Road ...	924	1,008	909	—	8	5	4	17	1·6
Gray Street... ...	949	1,010	918	7	6	3	—	16	1·5
Linacre	975	1,133	1,012	2	4	4	4	14	1·2
St. James'	1,405	1,523	1,348	1	4	—	2	7	0·4
St. James' Select ...	473	386	344	—	1	4	1	6	1·5
St. Winefride's ...	898	884	793	2	2	1	—	5	0·5
St. Mary's	875	885	778	—	—	3	2	5	0·5
St. John's	794	869	774	2	1	—	—	3	0·3
Orrell	1,020	663	619	—	—	1	—	1	0·1
Boys' Secondary School	—	—	—	—	1	1	1	3	
Five Private Schools	—	—	—	1	3	2	1	7	
Seven Schools outside the Borough	—	—	—	8	1	3	—	12	
Totals ...	11,694	11,919	10,798	37	37	50	38	162	

Seeing that 30 per cent. of the notified cases were nursed at home, it is of interest to note the effect, if any, this had upon the number of multiple cases. For this purpose the following table has been prepared :—

Total number of houses where—					No. of houses	Cases nursed at home	Cases sent to Hospital	Total Cases				
1 member of family attacked	...	174	...	56	...	118	...	174				
2 members	„	39	...	26	...	52	...	78				
3	„	9	...	5	...	22	...	27				
4	„	1	...	—	...	4	...	4				
5	„	1	...	—	...	5	...	5				
Totals					...	224	...	87	...	201	...	288

In considering the above table it should be observed that the patients nursed at home were selected cases, and that the basis of the selection was on the means of isolation available, and on the number of other children in the house liable to contract Scarlet Fever.

It will be seen that multiple cases occurred in 50 dwellings, representing 22 per cent. of the infected houses. The total number of cases arising in these houses was 114.

If for the time being it is assumed that in each of these premises, all the cases except the first one notified, could have been prevented, then 64 remain to be accounted for.

Of these 64—

9 were return cases from hospital.

18 were reported simultaneously with the original infecting case.

31 were further cases reported at houses from which the primary cases had been removed to hospital.

6 were further cases reported at houses where the primary cases were nursed at home.

With reference to the 31 cases mentioned in the above list, where the primary cases were removed to hospital, the time elapsing between the notification of the primary cases and the notification of further cases was as follows :—

In 2 cases 1 day	In 1 case 24 days
„ 4 „ 2 days	„ 1 „ 25 „
„ 1 case 3 „	„ 2 cases 34 „
„ 5 cases 4 „	„ 1 case 41 „
„ 1 case 5 „	„ 1 „ 54 „
„ 1 „ 6 „	„ 1 „ 78 „
„ 3 cases 8 „	„ 1 „ 90 „
„ 1 case 16 „	„ 1 „ 97 „
„ 1 „ 18 „	„ 1 „ 107 „
„ 1 „ 19 „	—
„ 1 „ 22 „	Total <u>31</u> cases

In comparing the number of multiple cases arising in houses from which the primary cases were removed to hospital, with the number of multiple cases where home treatment was adopted from the first, it must be noted that in the houses from which the 201 hospital cases came, there were 330 other children who had not had Scarlet Fever, and in the 87 dwellings where the patients were nursed at home only 78 remaining children were liable to contract the disease.

DIPHTHERIA.

The cases occurred in the Wards as under:—

Derby	Stanley	Mersey	Knowsley	Linacre	Orrell
25	...	7	...	3	5

As in the previous year, the greatest number arose in Derby Ward; the portion of the Borough where Scarlatina was also most prevalent.

Of the 54 notified cases 19 occurred in infants not attending school, and of the latter 4 proved fatal. 30 school children were also reported to be suffering from Diphtheria. The case mortality amongst this group was very low, only 2 deaths occurring. The remaining 5 persons attacked were above school age, and all recovered.

The following table is a summary of the cases notified during the last 14 years:—

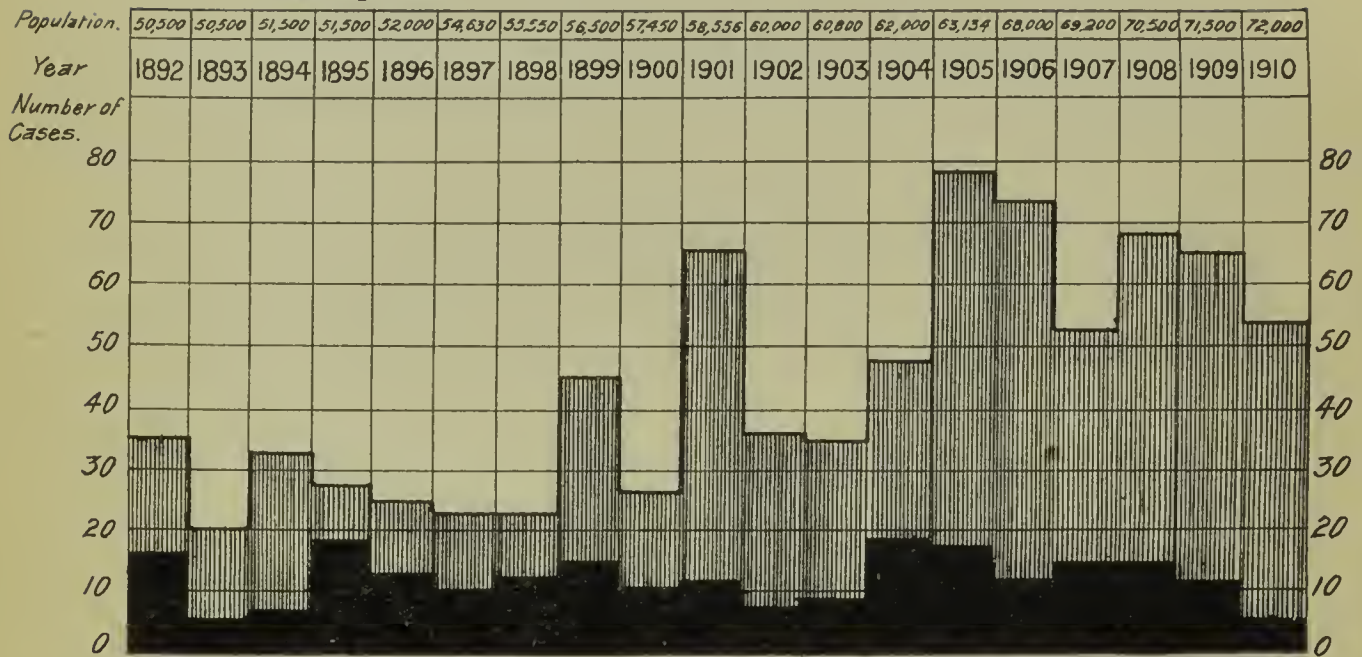
	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Number of cases notified, including Croup ...	21	21	45	24	64	34	33	48	78	74	52	68	64	54
Number of deaths, including Croup	11	12	14	10	11	8	9	19	18	11	14	14	10	6
Number of cases admitted to Hospital ...	5	4	12	9	45	25	20	36	48	42	40	29	42	39
Number of deaths in Hospital ...	1	2	—	4	7	2	4	12	9	7	7	6	5	4
TRACHEOTOMY—														
Number of cases	(No record)		—	3	11	8	4	9	8	11	8	1	3	4
Number of deaths	(No record)		—	—	2	—	3	3	3	4	4	—	1	2
*Hospital Mortality	20%	50%	0%	44%	15%	8%	20%	33%	18%	16%	17%	20%	11%	10%
*Outside Mortality	62%	58%	42%	40%	21%	66%	37%	58%	30%	12%	58%	20%	22%	13%

*NOTE—The numbers dealt with are so small that the percentages are of very little value.

DIPHTHERIA.

Diagram shewing the number of Notifications received each year since 1892.

The darker shading corresponds to the number of deaths during the same period.



ENTERIC FEVER.

During the year only 12 cases were notified, and of these 6 were removed to hospital.

The 12 notified cases were distributed among the wards as follows:—

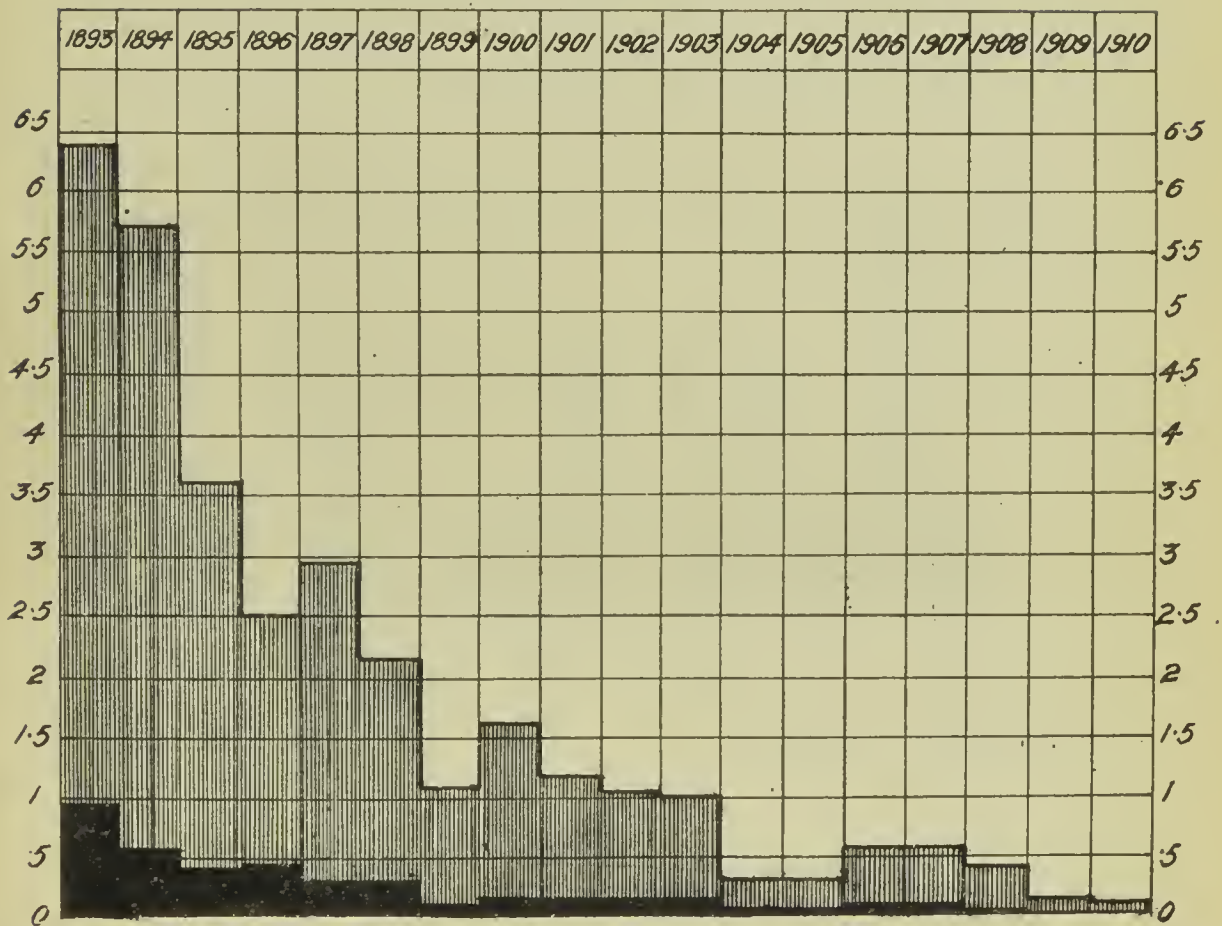
Derby		Stanley		Mersey		Knowsley		Linacre		Orrell
4	...	1	...	4	...	1	...	2	...	—

In no town has a greater success followed the conversion of privies into water-closets than in Bootle. The Corporation paid half the expense of the conversions.

This money was certainly well spent, and the results have been of incalculable benefit to the Borough. In order to better illustrate the conditions that prevailed 18 years ago with those of to-day, the following diagram relating to Enteric Fever has been prepared.

ENTERIC FEVER.

Diagram shewing the number of Notifications per 1,000 of the population received each year since 1893. The darker shading corresponds to the number of deaths per 1,000 of the population during the same period.



TYPHUS FEVER.

No cases of this disease have been reported during the year.

MEASLES.

Of the 22 deaths from measles all except 2 occurred in children below the age of 5 years.

The Elementary Education Authorities reported to the Medical Officer of Health 280 cases. All these recovered except one case.

Not being a compulsorily notifiable disease, the number of cases of measles which occur cannot be accurately estimated.

All cases are visited and re-visited by the Health Visitors. There is no doubt that the timely advice given to the parents of sick children has resulted in the saving of a considerable number of lives of children who would otherwise have died from measles or its complications.

Owing to the incidence of measles amongst the scholars, it was found advisable in the early part of the year to close the Infants' Department of one of the schools for two weeks.

Table showing certain statistics with regard to Measles for the past 19 years:—

Year	Total Deaths			Ages at Death.				
				Under 1	1 to 5	5 to 15	15 to 25	25 to 65
1892	...	7	...	—	...	7	...	—
1893	...	24	...	—	...	21	...	3
1894	...	15	...	—	...	14	...	1
1895	...	2	...	—	...	1	...	1
1896	...	28	...	—	...	26	...	2
1897	...	14	...	—	...	14	...	—
1898	...	7	...	—	...	7	...	—
1899	...	6	...	—	...	6	...	—
1900	...	21	...	8	...	11	...	2
1901	...	5	...	1	...	3	...	1
1902	...	46	...	9	...	35	...	2
1903	...	2	...	1	...	1	...	—
1904	...	48	...	9	...	39	...	—
1905	...	9	...	2	...	7	...	—
1906	...	44	...	2	...	37	...	5*
1907	...	16	...	4	...	12	...	—
1908	...	34	...	4	...	30	...	—
1909	...	68	...	14	...	50	...	4*
1910	...	22	...	8	...	12	...	1

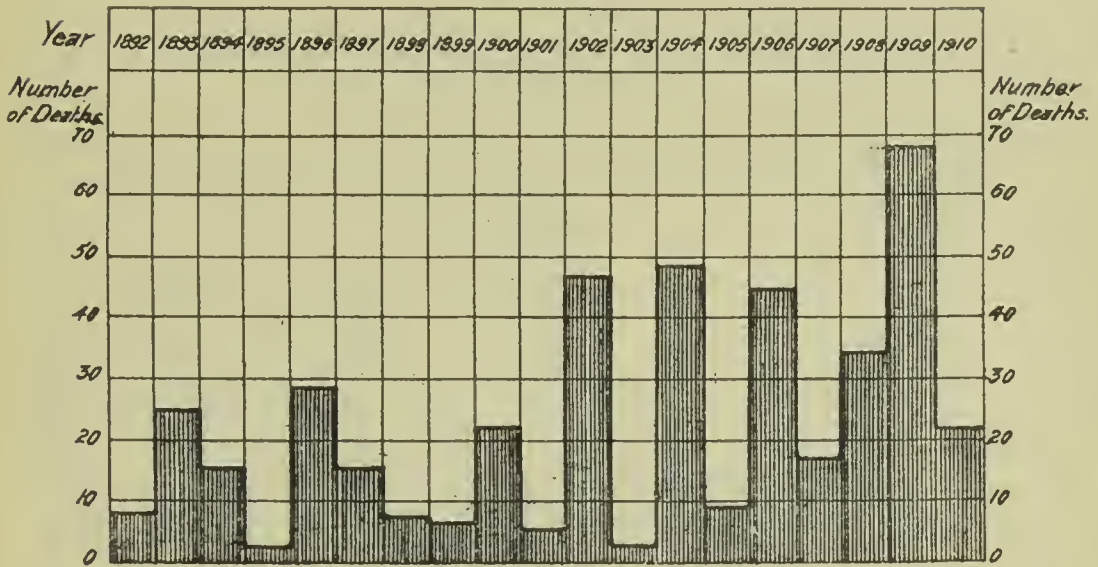
Deaths under one year were not differentiated from the next class until 1900.

* All these were children just over 5 years of age.

Table showing mortality from Measles per 1,000 persons living at the undermentioned age groups :—

Below 1		1 to 5		5 to 15		15 to 25		25 to 65		over 65
4.0	...	1.7	...	.06	...	—	...	.03	...	—

DEATHS IN BOOTLE DURING NINETEEN YEARS (1892-1910)
FROM MEASLES.



WHOOPIŃG COUGH.

Whooping Cough caused 32 deaths during the year 1910. This is equal to a rate of .44 per 1,000 of the total population. In 1909 the mortality from Whooping Cough was .04 per 1,000.

Number of Deaths from Whooping Cough each year since 1893.

	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Deaths	32	22	26	14	14	27	21	56	6	23	16	41	20	30	28	42	3	32

Number of Deaths from Whooping Cough and the death rates at the following age groups :—

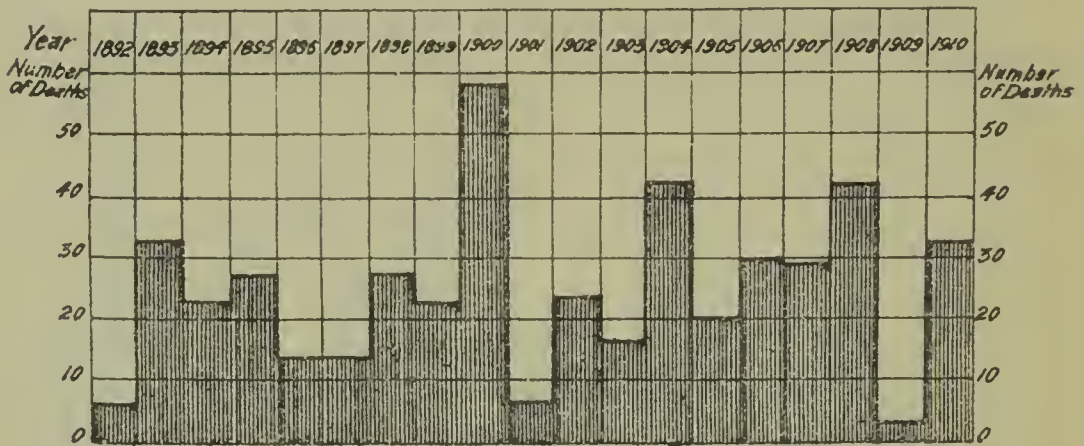
	Age under 1	1 to 5	5 to 15	15 to 25	25 to 65
Deaths ...	12	18	2	—	—
Rate per 1,000 ...	6·0	2·6	0·1	—	—

227 cases of the disease were reported to the Health Department by the School Authorities.

As in the case of Measles, an Inspector visits each notified case, and gives instructions as regards isolation, &c. The parents are also recommended to call in the aid of a medical man, and in many cases this advice is acted upon.

The diagrams on this page and on page 31 are interesting. They show the difference each year in the number of deaths from Whooping Cough and Measles. They demonstrate also that, notwithstanding the progress made in sanitation generally, the deaths from these diseases have shown no permanent decline since 1892.

DEATHS IN BOOTLE DURING NINETEEN YEARS (1892-1910)
FROM WHOOPING COUGH.



CASES OF INFECTIOUS DISEASE NOTIFIED BY THE ELEMENTARY EDUCATION
AUTHORITY TO THE MEDICAL OFFICER OF HEALTH.
1910.

SCHOOL.	Measles.	Chicken Pox	Whooping Cough.	Other Diseases.	TOTALS.
Salisbury Road ...	20	5	15	40	80
Hawthorne Road...	21	—	—	1	22
Linacre Lane ...	64	9	45	14	132
Bedford Road ...	95	11	14	46	166
Gray Street ...	17	21	13	17	68
St. James' ...	32	4	66	67	169
St. Mary's ...	6	21	25	135	187
Christ Church ...	5	2	4	5	16
St. John's ...	7	8	24	95	134
St. Alexander's ...	11	3	8	64	86
St. Winefride's ...	2	2	13	56	73
Totals ...	280	86	227	540	1,133
Number of visits and re-visits ...	612	178	421	1,012	2,223

DIARRHŒA.

During 1910, of the 64 deaths registered under the heading of Diarrhœa, 37 occurred in children below the age of one year.

The following is a list of the Streets and Wards in which the deaths took place :—

DERBY WARD.	STANLEY WARD.	MERSEY WARD.
Brookhill Road... 1	Beatrice Street ... 1	Berry Street ... 2
Devon Street ... 1	Bedford Road ... 1	Brasenose Road ... 2
Kent Street ... 1	Cambridge Road... 1	Canal Street ... 1
Litherland Road.. 3	Olivia Street ... 1	Kirk Street ... 1
Pine Grove ... 2	Stanley Road ... 1	Lincoln Street ... 1
Thornton Road ... 1	Viola Street ... 1	Pleasant Grove ... 1
—	—	Pleasant View ... 1
10	6	Seaforth Street ... 1
—	—	Sheridan Place ... 1
		Tattersall Place ... 1
		—
		12
		—
KNOWSLEY WARD.	LINACRE WARD.	ORRELL WARD.
Audley Street ... 1	Addison Street ... 2	Edith Road ... 1
Bank Cottages ... 1	Armstrong Street.. 2	Elizabeth Road ... 1
Boreland Street... 2	Cowper Street ... 1	Staley Street ... 1
Brook Road ... 1	Cranworth Street.. 1	—
Bullens Terrace... 2	Longfellow Street.. 1	3
Delaware Street... 1	Percy Street ... 1	—
Denbigh Street... 2	Pope Street ... 1	
Flint Street ... 2	Shelley Street ... 1	
Holywell Street... 1	Smollett Street ... 1	
Milton Street ... 1	Southey Street ... 1	
Rhyl Street ... 1	Spenser Street ... 1	
Sea View Road ... 1	—	
Stafford Street ... 1	13	
Strand Road ... 2	—	
Tudno Street ... 1		
—		
20		
—		

PARTICULARS RELATING TO THE FEEDING OF THE 37 INFANTS.

8 cases were said to have been fed on breast milk only.

3 „ had been recently weaned.

18 „ were fed by hand since birth.

8 „ „ partly on the breast and partly by hand (2 recently weaned).

In nearly every case where a feeding bottle was necessary the boat-shaped variety was found in use.

In the following instances three or more deaths of children had occurred previously in the same family:—

No. of Children.	No. dead.	From Diarrhœa	Parents Drink?	Feeding.
11	3	3	No.	Hand fed cow's milk.
19	14	10	?	Breast fed and Nestle's milk.
6	3	3	No.	Breast fed.

Since 1907 a system of voluntary notification of cases of Diarrhœa, occurring in children under the age of one year, has been in force during the months of July, August and September.

For the notification of each case the medical attendant was offered 2s. 6d. and was requested to report only those in which he was of opinion that the services of a Lady Health Visitor would be both useful and welcome.

This resulted in 38 notifications being received in the year 1910.

19 of the patients were reported by two doctors, the remaining 19 cases coming from other medical men.

Of those notified 7 died, 2 of these had been delicate from birth, and 2 others were moribund when reported. In these latter cases no useful result could, at this late stage of the illness, follow notification of the disease.

The remaining 31 cases, i.e., 81 per cent. of the total, all recovered.

PHTHISIS.

During the year 1910, 83 deaths were ascribed to Phthisis, equal to a rate of 1·1 per 1,000 of the total population.

The following table gives the Ward distribution of Phthisis, the total deaths each year, and the death rate per 1,000 since 1901 :—

Year	Derby	Stanley	Mersey	Knowsley	Linacre	Orrell	Totals	Rate per 1,000 of the population
1901	11	11	31	18	7	—	78	1·3
1902	11	12	35	25	16	—	99	1·6
1903	9	12	22	18	15	—	76	1·2
1904	15	12	31	31	11	—	100	1·6
1905	12	8	27	15	16	—	78	1·2
1906	6	9	27	17	21	*6	86	1·2
1907	14	11	13	11	30	3	82	1·1
1908	13	12	34	16	26	3	104	1·4
1909	15	9	18	20	15	4	81	1·1
1910	10	16	19	13	20	5	83	1·1

* Previous to 1906 the statistics for Orrell were not included.

Table showing progressive decline in the death rate from Phthisis in the whole of England and Wales during the last four decades :—

	1866 to 1875	1876 to 1885	1886 to 1895	1896 to 1905
Average annual death-rate per 1,000 of the population from Phthisis ...	2·32	1·93	1·54	1·26

At present there are four sources of information.

1. The voluntary system of notification of Phthisis.
2. Cases discovered by the School Medical Officer amongst the children in the Elementary Schools.
3. Cases reported by the Poor Law Medical Officers in pursuance of the Tuberculosis Order issued by the Local Government Board in January, 1909.
4. Deaths notified by the local Registrar.

Systematic enquiries are made into all cases coming to the knowledge of the Health Department. Besides giving instructions as to the best methods of combating this disease, an offer is always made to disinfect the infected rooms, &c., free of charge, and, if the consent of the owner can be obtained, the Corporation at their own expense strip the old paper from the walls of

these rooms. A pocket spittoon is also presented to those patients found to require one, and instructions given as to how to use and cleanse this article. Frequent re-visits are made to the cases in order to give any further advice or assistance that may be necessary.

The number of cases reported is as follows :—

NOTIFICATION OF PHTHISIS.

	Year	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Voluntary notification	...	22	22	21	40	22	18	7	24	18	22
Cases reported by the School Medical Officer	—	—	—	—	—	—	—	8	8	6
Cases reported by the Poor Law Medical Officers	...	—	—	—	—	—	—	—	—	124	95
Cases of which the first notification appeared in the Death Returns	—	—	—	—	—	—	—	—	22	34
Totals	...	22	22	21	40	22	18	7	32	172	157

Cases reported during the year 1910, grouped according to age periods :—

Age.	Number of Deaths.	Surviving Cases.
Under 15.....	6	15
15 and under 25.....	17	18
25 „ „ 35.....	18	17
35 „ „ 45.....	24	13
45 „ „ 55.....	14	4
55 „ „ 65.....	4	7
	88	74

157

25 of the deaths from Phthisis occurred in Workhouses.

From enquiries made, the following particulars as to occupation were ascertained :—

No. of Cases.	Occupation (if any).	No. of fatal Cases.	No. of non-fatal cases.	Remarks.
2	.....	1	1	Below school age. School children.
20	.....	6	14	
35	Housewives and Widows...	21	14	
8	Domestic Servants	3	5	
26	Dock Labourers	7	19	
9	General Labourers	6	3	
2	Engineers.....	1	1	
3	Clerks.....	3	—	
1	Publican.....	1	—	
2	Firemen	—	2	
1	Mariner	—	1	
1	News Vendor.....	1	—	
13	Factory Hands.....	5	8	
2	Painters.....	2	—	
2	Laundresses	1	1	
1	Tailor.....	1	—	
3	Ship's Stewards.....	2	1	
1	Cab Driver.....	1	—	
2	Plumbers.....	2	—	
1	Confectioner	1	—	
1	Waitress	1	—	
2	Carters.....	2	—	
1	Joiner	1	—	
1	Shoe Maker.....	1	—	
1	Hairdresser	1	—	
1	Dressmaker	1	—	
1	Gas Inspector.....	1	—	
1	Gas Stoker.....	1	—	
1	School Caretaker.....	1	—	
1	Tram Driver.....	1	—	
1	Stone Mason.....	1	—	
1	Compositor.....	1	—	
1	Porter	—	1	
1	Fried Fish Dealer.....	—	1	
1	Soldier.....	—	1	
1	Instrument Maker.....	1	—	
5	None	4	1	
157		83	74	

A further analysis of the information obtained shows that in—

13	of the 83 fatal cases,	other deaths from Phthisis had previously occurred in the same family.
28	„ „ „	had on 2 or more occasions changed their residence since becoming ill.
33	„ „ „	were treated at the Workhouse Hospitals at some period of their illness.
9	„ „ „	had been treated at other hospitals.
41	„ „ „	had not received hospital treatment.
49	of the 74 non-fatal cases	had been inmates of the Workhouse Hospital, or were then in-patients.
14	„ „ „	had received treatment at other hospitals.
11	„ „ „	had not received treatment at a hospital.
In 22	„ „ „	these were not the first cases in the family.
39	„ „ „	had on 2 or more occasions changed their residence since illness commenced.

It is evident that the pronounced migratory tendency of Phthisical patient will render preventive measures more difficult.

Although frequent visits are made to known cases, it often happens that the patient has, in the interval between the inspections, left the neighbourhood and cannot be traced.

In 6 houses where Phthisis was known to exist in some member of the family, and where disinfection had been refused, other cases arose in the next family who came to occupy the premises. In no instance did a further case occur where a house had been disinfected before being re-let.

If, therefore, it became the practice to disinfect and cleanse all dwellings immediately they became empty much good would result. This would probably lead to a reduction in the number of persons attacked by Phthisis, and would also tend to lessen the prevalence of other diseases.

Twenty-two per cent. of the cases occurred in families from which a previous history of Phthisis was obtainable.

Of the cases reported 66 per cent. had at one time or other received hospital treatment, and of these 78 per cent. had been inmates of the Work-house Hospitals, a small number being afterwards transferred to a Sanatorium.

At the request of the Health Committee the Medical Officer of Health made a report in August, 1910, concerning the question of Sanatoria for the accommodation of patients suffering from Phthisis.

In the report which is still under consideration it was stated that some Local Authorities had already provided for the treatment of this disease.

1. By establishing Dispensaries for out-patients.
2. By providing treatment in a Sanatorium for a short period (one month) during which a patient in the early stage of the disease receives what may be termed "Educational Treatment."
3. Treatment in a Sanatorium, for a period of three months, of persons in a more advanced stage of Phthisis, where a cure is still possible.

It was also mentioned that the West Derby Union possesses a Sanatorium, but that it was impossible for all cases requiring treatment to be sent there, and that the question of hospital accommodation was being forced forward by the increasing tendency of general infirmaries to limit the number of Phthisis cases treated at these institutions.

The schemes suggested for consideration were—

1. That the house adjoining the New Cemetery Grounds and owned by the Corporation might be adapted for use as a Sanatorium, and that a few Bungalows costing about £30 each be used in connection with it; or,
2. That the old Small Pox wards at Linacre Hospital be altered and used as a Sanatorium, after accommodation has been provided for Small Pox at Maghull.
3. That arrangements be made to provide a Dispensary for out-door patients in connection with either of the above schemes.

ALCOHOLISM.

During the year 1910, 7 deaths were assigned to Alcoholism, compared with 8 in 1909, and 9 in 1908.

This small number does not in any way indicate the full extent of the injury to health caused by excessive drinking.

THE MIDWIVES ACT.

The number of names of women on the local roll of midwives is 29. In addition to these, 4 others who reside outside the district, gave notice of their intention to practice within the Borough.

Of the local midwives, three have not passed any qualifying examination, but each of these has been recognised by the Central Midwives Board, in consequence of having been in practice as a midwife for at least one year previous to July 31st, 1902.

In compliance with Section 8 of the Act, the Central Authority has been supplied with the following information :—

Change of name	...	...	...	...	...	—
Change of address	...	...	...	...	...	3
Notice of intention to cease practice	...	...	...	...	...	2
Death of midwife	...	...	...	...	...	1

Under the rules of the Central Midwives Board (Section 18 E.) the following notifications have been received :—

Records of sending for medical help	...	...	...	84
Still births...	...	...	...	56
*Death of child before attendance of a medical practitioner	...	...	...	1
Cases of puerperal fever notified by midwives	...	...	...	—
Cases of infectious disease	...	...	...	—

* This case was inquired into by the Medical Officer of Health.

Of the 29 midwives, 17 devote their whole time to the work. The others are only partially employed.

Number of births in Bootle attended by midwives who reside outside the district	...	...	...	...	221
Births attended by the 29 local midwives	...	...	...	...	1,433
Highest number of births attended by one midwife	...	...	...	...	226
Lowest	„	„	„	„	1
Still births attended by midwives	...	...	...	...	56
Percentage of still births to total births attended by midwives	...	...	...	...	3·9

The following particulars relate to the period of pregnancy during which the still births took place :—

At 6 months	...	...	...	4 cases.
„ 7 „	...	...	...	13 „
„ 8 „	...	...	...	10 „
„ 9 „	...	...	...	29 „
Total still births	...	...	...	<u>56</u>

In reference to the 84 records of sending for medical help, it may be noted that this number gives a percentage of 5·0 to the total confinements.

The following is a list of the complications for which medical assistance was required.

Abnormal Presentations—

Transverse presentation	...	...	...	4
Brow or face presentation	...	...	...	2
Occipito-posterior	...	...	...	4
Breech	...	...	...	3
Foot	...	...	...	2
Cord	...	...	...	1
Placenta prævia	...	...	...	3

Other complications—

Deformed pelvis	...	...	...	11
Retained placenta or membranes	...	...	...	3
Ruptured perineum	...	...	...	8
Obstructed labour	...	...	...	8
Uterine inertia	...	...	...	7
Requiring instrumental assistance	...	...	...	14
Various or not specified	...	...	...	14

Total 84

PUERPERAL FEVER.

During the year 2 cases were notified, and of these 1 died, giving a mortality from this disease of .49 per 1,000 births.

The death rate from Puerperal Fever for the whole of England and Wales during the previous 10 years was 2.0 per 1,000 births.

With one or two exceptions the midwives have, during the year, carried out their duties efficiently.

The case books have been well kept, the bags and appliances were found in a cleanly state, and the reports of the routine visits paid to the homes of the midwives show that their houses are, as a rule, kept in a scrupulously clean condition.

In only one instance, as far as is known, was there any serious delay in sending for medical aid.

SUB-LET HOUSES.

The Medical Officer of Health is directed by the Local Government Board to include, *inter alia*, in his report some definite information as to :—

1. House accommodation, especially for the working classes: its adequacy and fitness for habitation. Sufficiency of space about houses and cleanliness of surroundings.
2. Bye-laws as to houses let in lodgings. Details as to the number of such premises. Any need for amendments or further bye-laws.

In compliance with these directions the following observations may be made :—

There are 207 sub-let houses on the register. Although the number actually registered is comparatively small, the number of houses kept under observation is over 600, and to these 5,521 visits were made in 1910.

The inhabitants are very migratory, and it is difficult to keep the register correctly. Many of the tenants only stay in a house long enough to permit of cards and tickets being affixed, and, very often, when the house is again visited in two or three weeks, it is found to be empty.

Probably less than 10 per cent. of the sub-let houses in Bootle are registered as such.

One serious defect in our present bye-laws is that no proceedings can be taken under them in cases where it is necessary, from a moral point of view, to separate the sexes. This matter is quite as important as overcrowding.

As stated in the Annual Report for the year 1908, one outstanding fact, bearing greatly upon the general condition of a large section of the population is the evil effects due to the casual nature of employment at the docks. It has been computed that the average wage of a dock labourer amounts to 18s. per week.

Unfortunately, there are very few small self-contained houses at a rental within this limited income, and it is therefore not surprising to find that in that portion of Mersey Ward adjoining the docks, about 37 per cent. of the houses are sub-let.

Private enterprise has not catered for the housing of such families in separate dwellings, consequently there is no alternative but to take rooms in a house which was not built for nor intended to be used as a sub-let dwelling.

In this portion of Mersey Ward, most of the property is old, with narrow back passages and yard spaces less than half of that required for modern houses. In addition to this, there being practically no public or open space of any reasonable size (except Falkner Crescent) it is not surprising to find that here the death rate is practically double that of the town in general, and that in Mersey Ward the deaths of infants under the age of one year has, for the past ten years, averaged 191 per 1,000 births, against an average for the whole Borough of 146 during the same period.

Sub-letting is by no means confined to Mersey Ward, but in this and all other parts of the Borough where houses are occupied by members of more than one family, one or more of the following defects exist, except in the case of ground floor rooms.

(a) NO SUITABLE AND CONVENIENT WATER SUPPLY.

In sub-let houses there is usually only one water tap for the use of the various families. This tap is, as a rule, fixed in the scullery on the ground floor, therefore all the tenants, except those on the ground floor, are obliged to

carry pails of water upstairs to their rooms. This leads to the water for cooking and drinking purposes being very often stored in undesirable places where it is liable to contamination.

Seeing that all the water for drinking and domestic purposes has to be carried and stored in this way it follows as an inevitable result that very little water is used, and this does not conduce to habits of cleanliness.

(b) NO SCULLERY NOR SINK.

Usually the only accommodation of this kind is on the ground floor. All waste water from the sub-let rooms above has to be carried to the ground floor and poured down the sink in the scullery.

This, besides being inconvenient, is a source of annoyance to the other tenants, especially to the occupier of the kitchen or other room through which the waste water has to be carried.

It can only be expected that under these circumstances, it is a very difficult matter for personal clothing to be properly washed, or for washing of any kind to be efficiently done.

(c) NO PROPER PLACE TO STORE FOOD.

The rooms above the ground floor having been built for use as bedrooms, are not provided with a proper place for the storage of provisions. This results in such foods as milk, meat and fish deteriorating much more rapidly than would be the case under proper conditions of storage, and permits of these and other foods being contaminated by flies and dust.

(d) SMALL BEDROOM FIREPLACE QUITE UNSUITABLE FOR COOKING PURPOSES.

In many cases the grates are so small that a frying pan cannot be put on the fire.

(e) BAD ACCESS TO WATER-CLOSET.

The bye-laws with respect to houses let in lodgings, or occupied by members of more than one family, demand one water-closet to be provided for every twelve persons occupying the house.

Whatever the number of persons in a sub-let house, a water-closet on each floor is in many cases necessary. This would obviate the necessity of carrying chamber utensils down the stairs and through a room possibly occupied by another family, and would prevent the nuisance sometimes caused by tenants throwing filth through the window into the street, yard, or passage below.

If the bye-laws relating to houses let in lodgings were amended so as to satisfactorily deal with the conditions just enumerated, it would result in a distinct improvement in housing.

HOUSING ACTS.

During the year 1910 no action was taken under the Housing of the Working Classes Acts. The Medical Officer of Health, however was requested to report upon the Housing, Town Planning, &c., Act, 1909. This Act makes it compulsory upon the Local Authority to cause a thorough inspection to be made from time to time of all dwellings whose rental does not exceed £26 per annum. A record of the inspections must be kept in the form prescribed by the Local Government Board, and a report made each year on the work done under the Act.

It was reported to the Health Committee that with the present staff of three male Inspectors it was practically impossible to do any special house to house inspection work in the manner required, owing to the increased area and population of the town, and the numerous duties, during recent years, forced on the Department by new legislation; these factors have gradually made it impossible to do anything but give attention to imperative matters.

To carry out the minimum requirements under the Housing, Town Planning, &c., Act., and to some extent relieve the present congestion of work, it was recommended that another Sanitary Inspector be at once appointed. The Health Committee after careful consideration of the report recommended the appointment of an additional Inspector, but this recommendation did not meet with the approval of the Council.

FOOD INSPECTION.

The Local Government Board desire to be informed precisely what arrangements are made by the Council for the inspection of meat in the Borough, and in compliance with instructions the following particulars are given.

Only two slaughter houses are in use. As to one of these, the license was given on condition that no animals except those belonging to the licensee would be slaughtered there, unless information as to the time of slaughtering was previously supplied to the Medical Officer of Health. Nearly all the meat consumed in Bootle comes from the Liverpool or Birkenhead public slaughter houses, or is imported in a frozen condition from abroad. No carcasses during the year were found to be tuberculous.

Neither of the three Inspectors possess a special certificate in meat inspection, but one of them is studying for it.

The dairy cows are periodically examined by a Veterinary Surgeon, who has made the following report on the work done by him during the year 1910:—

“ The Medical Officer of Health,
Bootle.

Dear Sir,

I am pleased to report that in 1910, I continued to find the good quality and condition of the cows in the 34 shippens to be maintained. There were 500 cows housed in the shippens. Each cow's udder was examined at each quarterly inspection, and only about 5 cows were removed owing to an unsatisfactory condition of their udders. I have been asked several times to give advice about the purchase of new cows whose udders were not quite satisfactory to the buyer, and my advice has been acted upon. The shippens and utensils all have a good deal of time and attention devoted to them to keep them clean. Several samples of milk have been examined for the tubercle bacillus, but nothing of a suspicious character was reported.

I beg to remain,

Yours truly,

JAS. SUMNER,

Veterinary Inspector.”

With reference to the 5 dairy cows with unsatisfactory udders sent out of the Bootle Shippens on the recommendation of the Veterinary Inspector, nothing is definitely known as to what became of these animals. It is surmised that they were sold at the Stanley Cattle Market, Liverpool.

The duties connected with the sampling and examination of food have increased very much during recent years, and there is, at the present time, enough work of this description to occupy the whole time of a Special Inspector.

The duties of such an Officer would include—

1. Taking samples under the Food and Drugs Acts.
2. Inspection of premises where food is in course of preparation for sale.
3. Inspection of food shops and slaughter houses.
4. „ „ dairies and cowsheds.
5. „ under the Contagious Diseases of Animals Acts.
6. „ of bakehouses.
7. „ „ imported foods (at docks).
8. „ „ foods for export to the United States of America and to the Argentine Republic.

EXTERMINATION OF RATS.

During recent years rats appear to have become much more numerous in this district, and many complaints have been made of the damage done by them in houses, hotels, restaurants, provision warehouses, factories, workshops, timber sheds, etc.

These considerations, together with the well established fact that rats carry disease and contaminate food with the filth they pick up from refuse heaps, led the Council to adopt some measure, having for its object the extermination of these pests.

For this purpose it was decided to employ an experienced ratcatcher to work in the sewers and on other Corporation property for a period of one month ; this resulted in 1,004 rats being trapped, 790 in the sewers and 214 at the refuse destructor, the average catch per day being 41.

As united action was essential to success it was suggested by advertisement in the local newspaper that owners or occupiers of private property infested with rats should co-operate with the Committee, and for that purpose to—

1st.—Persistently and systematically destroy all rats.

2nd.—Remove and obliterate their nests, burrows and habitual haunts, and

3rd.—Make each dwelling as far as practicable rat-proof, and remove all known harbourage for rats in or near dwellings.

4th.—At the same time not allow waste food (whether for human beings, chickens, or other animals) to accumulate in or about the house.

The result of the plan adopted was so successful that the Corporation decided to retain the services of the ratcatcher for a period of 12 months.

FACTORY AND WORKSHOP ACT, 1901.

The Medical Officer of Health is required to make and to transmit to the Secretary of State an annual summary of the work done under this Act. The following are copies of the official tables to be sent to the Home Office. Additional details will be found on pages 60, 61 and 62.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES AND HOMEWORK.

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (Including Factory Laundries)	146	18	—
Workshops (Including Workshop Laundries)	542	67	—
Workplaces (other than Outworkers' Premises included in Part 3 of this Report)	314	42	—
Totals	1,002	127	—

2.—DEFECTS FOUND.

Particulars.	Number of defects			Number of Prosecutions
	Found.	Remedied.	Referred to H M. Inspector.	
Nuisances under the Public Health Acts—				
Want of Cleanliness	56	56	2	—
Want of Ventilation	2	2	—	—
Overcrowding	1	1	—	—
Want of drainage of floors	19	19	—	—
Other Nuisances	38	38	—	—
Sanitary accomodation {insufficient	5	4	4	—
{unsuitable or}	6	6	6	—
{defective}	—	—	—	—
{not separate}	—	—	—	—
{for sexes}	—	—	—	—
Offences under the Factory and Workshop Act :—				
Illegal occupation of underground } bakehouses (S. 101)... ..	—	—	—	—
Breach of special sanitary require- } ments for bakehouses (SS. 97 to 100)	—	—	—	—
Other Offences	—	—	—	—
(Excluding offences relating to out- work which are included in Part 3 of this report)				
Totals	127	126	12	—

3.—HOME WORK.

NATURE OF WORK—

- Wearing Apparel 1. Making &c. Dungaree overalls, men's and women's underclothing. Dressmaking, Tailoring and Boot Repairing.
2. Cleaning and washing.

OUTWORKERS' LISTS, SECTION 107—

Lists received from Employers—

	Lists	Outworkers
Twice in the year	8	30
Once in the year	3	6

Number of Addresses of Outworkers received from other Councils	25
Number of Addresses of Outworkers forwarded to other Councils	34

Prosecutions—

Failing to keep or permit inspection of lists ..	...	...	—
Failing to send lists ... ..	..	...	—
Number of Inspections of Outworkers' Premises ...	...	...	136

Outwork in Unwholesome Premises, Section 108—

Instances ... ..	...	...	1
Notices served ... ..	...	...	1
Prosecutions ... ..	...	...	—

Outwork in Infected Premises, Sections 109 and 110—

Instances ... ..	...	...	—
Orders made (S. 110) ... ..	...	...	—
Prosecutions (SS. 109 and 110) ... ..	...	...	—

4.—REGISTERED WORKSHOPS.

Workshops on the Register (S. 131) at the end of the year.	Number.
Bakehouses	40
Confectionery Bakehouses	21
Workshops and Workplaces	146
Outworkers' Premises	25
Total number of workshops on register ...	232

5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspector of Factories—	
Failure to affix Abstract of the Factory and Workshop Act (S. 133)	2
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory Act (S. 5) { Notified by H.M. Insp'tor	17
Other { Reports (of action taken) sent to H.M. Inspector	16 (1 pending)
Underground Bakehouses (S. 101)—	9
Certificates granted during the year (Renewed)	18
In use at the end of 1910	18

SHOP HOURS ACT.

Under this Act a young person means anyone under the age of 18 years.

It is illegal to employ such a person for a longer period than 74 hours per week, including meal times.

Notices containing the chief provisions of the Act, must be displayed in a conspicuous place in shops.

The following is a summary of the work done under the act :—

No. of shops visited by day ...	...	...	...	196
No. of shops visited by night ...	...	...	...	52
No. of instances in which the provisions of the Act were found not to be complied with ...	...	...	...	14

In every case the cause for complaint was remedied after notice.

SEATS FOR SHOP ASSISTANTS ACT.

During the year it was found necessary in only 4 instances to give a notice under this Act. In these cases the necessary seats were provided.

BAKEHOUSES.

The details connected with the inspection of bakehouses will be found on page 61.

The number of bakehouses now on the register is 40, and to these 320 visits were made during the past year.

In twelve instances it was found necessary to call attention to the untidy condition of the tables and utensils, and in seven others to the dirty state of the walls and ceilings.

SALE OF FOOD AND DRUGS ACTS, YEAR 1910.

	Total Number of Samples Analysed.	Number Reported by Analyst as Adulter- ated.	Prosecu- tions.	Result.	Remarks.
Milk	98	35	19	19 convictions	In the remaining 16 cases the adulteration was so trifling as not to warrant prosecution, or the vendors were warned. Amount of fines and costs, £38 12s. 6d. Analyst's fee allowed in each conviction except one.
Butter	49	3	1	1 conviction	2 adulterations were of non-official samples. Amount of costs, £1 2s. 6d. Analyst's fee allowed in this conviction.
Lard	6	—	—	—	—
Coffee	1	—	—	—	—
Beer	9	—	—	—	—
Whiskey	3	—	—	—	—
Jam	7	—	—	—	—
Syrup	1	—	—	—	—
Treacle	1	—	—	—	—
Flour	6	—	—	—	—
Vinegar	2	—	—	—	—
Rice	1	—	—	—	—
Castor Oil	1	—	—	—	—
Cocoa	5	—	—	—	—
Honey	1	—	—	—	—
Lime Juice	1	—	—	—	—
Potted Shrimps...	2	1	—	—	In this case the adulteration was so trifling as not to warrant prosecution.
Glycerine	3	—	—	—	—
Vaseline	3	—	—	—	—
Totals... ..	200	39	20	—	—

NOTE.—Three samples of milk, four of meat pies, three of sausages, two of sardines and one of potted meat were also taken, for the purpose of Bacteriological Examination, to Professor Boyce at the Liverpool University.

The foregoing table shows that the largest number of samples purchased in Bootle were those of milk. This is in accordance with the recommendation of the Board of Agriculture, viz. : that the number of samples taken should total not less than 3 per 1,000 of the population, and half of these should be milk.

WATER ANALYSIS.

TABLE SHEWING MONTHLY ANALYSES OF WATER SUPPLIED BY THE LIVERPOOL WATER COMMITTEE TO BOOTLE DURING THE YEAR 1910.

Description.	Month.	Total Solid Matter in Solution	Ammonia.	Ammonia from Organic Matter by distillation with Alkaline Permanganate.	Nitrogen as Nitrates	Combined Chlorine	Oxygen required to oxidise		Total Hardness.
							In 15 mins	In 3 hrs.	
Vyrnwy	Jan.	4.76	.0015	.0045	.000	.80	.116	.203	1.95°
Rivington	,,	8.32	.003	.006	.000	1.37	.028	.055	3.57°
Green Lane Well	,,	32.92	.000	.0005	.742	3.30	.000	.000	20.56°
Vyrnwy	Feb.	4.32	.001	.005	.000	.80	.097	.194	1.69°
Rivington	,,	8.36	.004	.007	.000	1.40	.032	.066	3.51°
Green Lane Well	,,	33.90	.000	.000	.786	3.50	.001	.004	21.00°
Vyrnwy	Mar.	4.62	.003	.006	.000	.90	.079	.163	2.10°
Rivington	,,	8.58	.004	.005	.000	1.30	.028	.056	3.77°
Green Lane Well	,,	33.44	.000	.000	.786	3.40	.002	.004	21.21°
Vyrnwy	April	4.00	.002	.005	.000	.90	.075	.151	1.50°
Rivington	,,	8.70	.002	.004	.020	1.30	.020	.044	3.70°
Green Lane Well	,,	34.50	.000	.000	.610	3.40	.002	.004	22.30°
Vyrnwy	May	3.20	.001	.004	.000	.90	.079	.151	1.75°
Rivington	,,	7.80	.002	.004	.000	1.30	.018	.039	3.64°
Green Lane Well	,,	33.00	.000	.000	.568	3.40	.001	.003	21.87°
Vyrnwy	June	4.78	.003	.005	none	.90	.058	.115	1.80°
Rivington	,,	8.42	.002	.003	none	1.30	.012	.024	3.50°
Green Lane Well	,,	34.16	.001	.001	.568	3.40	none	none	21.00°
Vyrnwy	July	3.14	.002	.002	none	.85	.061	.118	1.40°
Rivington	,,	8.00	.002	.004	none	1.30	.008	.017	3.50°
Green Lane Well	,,	33.44	.001	none	.560	3.40	none	.001	21.00°
Vyrnwy	Aug.	3.18	.002	.003	none	.90	.063	.123	1.40°
Rivington	,,	8.04	.001	.002	none	1.30	.003	.016	3.50°
Green Lane Well	,,	33.56	.001	none	.517	3.40	none	none	21.00°
Vyrnwy	Sept.	4.28	.002	.003	none	.85	.112	.189	1.80°
Rivington	,,	8.20	.002	.004	none	1.30	.011	.020	3.60°
Green Lane Well	,,	33.70	.001	.001	.524	3.30	.033	.006	21.00°
Vyrnwy	Oct.	4.00	.003	.004	none	.85	.113	.205	1.50°
Rivington	,,	8.20	.002	.005	none	1.30	.015	.031	3.50°
Green Lane Well	,,	34.20	.001	.000	.584	3.40	.0015	.0045	21.20°
Vyrnwy	Nov.	4.20	.001	.005	none	.90	.103	.203	1.55°
Rivington	,,	8.00	.001	.003	trace	1.30	.011	.023	3.50°
Green Lane Well	,,	33.20	.000	.000	.540	3.30	.000	.0015	20.10°
Vyrnwy	Dec.	5.60	.002	.004	.000	.85	.122	.210	2.50°
Rivington	,,	8.40	.003	.005	.000	1.30	.030	.060	3.50°
Green Lane Well	,,	34.20	.002	.000	.540	3.40	.000	.001	20.10°

INFECTIOUS DISEASES HOSPITAL.

Dr. H. M. Cargin resigned his appointment at the Linares Infectious Diseases Hospital on the 30th August, and was succeeded as Resident Medical Officer by Dr. C. W. Laird who commenced duty on the 10th September.

The Council during the year expended the sum of £266 on the Maghull site in constructing main drains, a septic tank and filter, laying down the foundations for a ward to accommodate 20 smallpox patients, and in providing a water supply, &c.

The question of the sufficiency and efficiency of the hospital accommodation at Linacre was again considered, but no decision was arrived at.

From the following report it will be seen that during 1910, the total number of patients admitted to the Linacre Hospital was 325, and of these 69 or nearly 21 per cent were received from other districts.

CASES TREATED IN THE INFECTIOUS DISEASES HOSPITAL,
LINACRE, DURING THE YEAR 1910.

Resident Medical Officer : DR. C. W. LAIRD, M.B., B.Ch., B.A.O. (Dub.)

PATIENTS IN HOSPITAL ON JANUARY 1ST, 1910.

	Scarlet Fever.	Diphtheria.	Enteric Fever.
Bootle ...	33	4	1
Litherland ...	6	—	—
Formby ...	—	1	—
			Total—45

PATIENTS IN HOSPITAL ON DECEMBER 31ST, 1910.

		Scarlet Fever.		Diphtheria.		Enteric Fever.
Bootle	...	20	...	3	...	—
Litherland	...	3	...	—	...	—
Formby	...	—	...	—	...	—
						Total—26

CASES ADMITTED DURING THE YEAR 1910.

	No. of Cases.	No. of Deaths.	Percentage Mortality.
Scarlet Fever	247	5	2.02
Enteric Fever	6	—	—
Diphtheria	53	6	11.32
Typhus Fever	—	—	—
Smallpox	—	—	—
Other Diseases	19	2	10.53
	325	13	4.0

The cases were distributed as follows :—

Bootle 251. Litherland 62. Formby 6.

SCARLET FEVER.

Age.	Bootle.		Litherland.		Formby.		Totals.	Deaths.
	Males.	Females.	Males.	Females.	Males.	Females.		
0—1	—	—	—	—	—	—	—	—
1—2	1	2	—	—	—	—	3	—
2—3	7	2	—	1	—	—	10	—
3—4	6	8	1	2	—	—	17	2
4—5	11	12	2	4	—	—	29	1
5—10	47	45	9	13	—	3	117	1
10—15	14	21	4	5	1	—	45	1
15—20	4	6	2	1	—	—	13	—
20—25	1	1	—	—	—	—	2	—
25—35	3	2	2	—	1	—	8	—
35—45	1	2	—	—	—	—	3	—
Totals ...	95	101	20	26	2	3	247	5

The deaths were distributed as follows :—

Bootle 4. Litherland 1. Formby —

Discharges :—

Bootle 207. Litherland 50. Formby 5.

DIPHTHERIA.

Age.	Bootle.		Litherland.		Formby.		Totals.	Deaths.
	Males.	Females.	Males.	Females.	Males.	Females.		
0—1	—	—	—	—	—	—	—	—
1—2	—	—	—	—	—	—	—	—
2—3	3	1	—	—	—	—	4	1
3—4	1	2	—	1	—	—	4	—
4—5	2	4	1	3	—	—	10	3
5—10	10	12	3	1	—	1	27	2
10—15	1	1	2	—	—	—	4	—
15—20	2	1	—	—	—	—	3	—
20—25	—	—	—	—	—	—	—	—
25—35	—	—	—	1	—	—	1	—
35—45	—	—	—	—	—	—	—	—
Totals ...	19	21	6	6	—	1	53	6

Tracheotomy Cases—4 (2 deaths).

The deaths were distributed as follows :—

Bootle 4. Litherland 2. Formby —

Discharges :—

Bootle 37. Litherland 6. Formby 1.

ENTERIC FEVER.

Age.	Bootle.		Litherland.		Formby.		Totals.	Deaths.
	Males.	Females.	Males.	Females.	Males.	Females.		
0—5	—	—	—	—	—	—	—	—
5—10	—	1	—	—	—	—	1	—
10—15	—	2	—	1	—	—	3	—
15—20	—	—	—	—	—	—	—	—
20—25	1	—	—	—	—	—	1	—
25—35	—	—	—	—	—	—	—	—
35—45	—	—	1	—	—	—	1	—
45—55	—	—	—	—	—	—	—	—
55—65	—	—	—	—	—	—	—	—
Totals	1	3	1	1	—	—	6	—*

Discharges :—

Bootle 4. Litherland 2. Formby —

* No deaths from Enteric Fever.

The following information required by the Local Government Board, has been supplied by the Borough Engineer:—

“ Bootle is a County Borough, and is 1,946 acres in extent, excluding the bed of the River Mersey. It is bounded on the south and east by the City of Liverpool, on the north by the Urban Districts of Waterloo-with-Seaforth and Litherland. The western boundary of the Borough abuts on the mouth of the River Mersey.”

“ The land falls from east to west, i.e., towards the river. The highest parts are situated in the extreme north-east and south-east boundaries, and reach a height of 125 feet above mean sea level. The lower portions, adjoining the docks, are from 22 to 24 feet above mean sea level.”

“ The sewerage system is entirely by gravitation discharging direct into the river. The Borough is divided into four drainage districts with four separate outfalls on the river. One of these outfalls is used solely for Bootle, and one in addition conveys the sewage from Walton Gaol, situated within the City of Liverpool, one is used jointly with Liverpool, and the fourth also drains a portion of Seaforth and the greater portion of the drainage from Litherland, both Urban District Councils.”

“ Speaking generally, the sewers within the Borough are, so far as is known, sufficient for the needs of the Borough.”

“ The sewers have good falls, and with the exception of some passage sewers, are self-cleansing, and to these sewers Automatic Flushing Tanks, supplied with salt water, are fixed at all heads, for assisting the cleansing of same.”

“ Since October, 1903, all new house drains have been subjected to a water test before finally being approved.”

The following is a list of Ashbins and Ashpits in the Borough :—

Ashbins	...	...	...	4,219
Ashpits, single	...	...	...	1,622
Ashpits, double	...	...	...	4,430
Pail Closets	...	..	...	Nil
Middens, single	...	...	...	21
Middens, double	...	...	...	14

“The Ashbins are emptied once every week, and the Ashpits and Middens at least once every month.”

“The method adopted is to empty the Ashpits or Ashbins into light baskets, which are wheeled along the passage and emptied directly into a covered cart.”

Sanitary Administration.

SUMMARY OF THE WORK DONE BY THE LADY SANITARY INSPECTORS.

No. of Houses found dirty	...	...	...	...	...	232
„ Families visited	...	...	...	...	...	13,328
„ Houses re-visited	...	...	...	...	...	6,161
„ References to Sanitary Inspectors	...	...	...	...	...	109
„ Enquiry visits	...	...	...	...	...	1,265
„ Visits and re-visits to cases of minor infectious and other diseases notified by the Elementary Educa- tion Authorities	...	...	...	...	...	2,223
„ Sub-let Houses visited	...	...	...	...	...	2,268
„ Sub-let Houses found dirty	...	...	...	...	...	145
„ Routine visits to Midwives	...	...	...	...	...	78
„ Enquiries <i>re</i> Still-births	...	...	...	...	...	92
„ Other Enquiries	...	...	...	...	...	44
„ Visits made in reference to infants under one year of age	...	...	...	...	...	7,870
„ Total number of visits made to Houses by the Lady Inspectors in respect of the matters detailed above	...	...	...	...	...	12,459

NUISANCES.

No. of Complaints made by inhabitants	...	...	...	...	276
„ Nuisances discovered on above	...	...	...	...	472
„ Nuisances discovered on house to house inspection...	...	...	...	...	4,962
„ Notices issued to owners	...	...	...	...	2,772
„ Notices issued to occupiers	...	...	...	...	116

No. of Notes to Complainants	...	...	...	...	40
„ Notes sent to comply with notices	...	...	...	...	42
„ Nuisances re-inspected	...	...	...	...	7,924
„ Water closet conversions	...	...	...	...	297
„ Ashpits substituted by bins (does not include number fixed at new property)	...	...	...	...	24
„ Informations laid	...	...	...	...	5
„ Convictions	...	...	...	...	5
„ Magistrates' Orders obtained	..	...	...	...	2
Amount of Fines and Costs	...	...	...	£1 15s.	6d.

COMMUNICATIONS SENT OUT FROM OFFICE.

References to the Borough Engineer	...	...	...	...	241
„ „ Education Authorities	...	...	...	...	252
„ „ Public Library	...	...	...	...	362
„ „ House Surgeon, Bootle Hospital	...	...	...	...	362
„ „ Sunday Schools	...	...	...	...	178
„ „ Day Schools	...	...	...	...	889
„ „ Milk Vendors	...	...	...	...	246
Letters <i>re</i> Nuisances	...	...	...	...	279
Total					<u>2,809</u>

CANAL BOATS AND CATTLE SHIPS.

No. of Canal Boats inspected in 1910	...	...	...	...	256
„ Infringements :—					
Painting and Repairing	...	...	...	...	9
Removal of Bilge Water and Repair of Bilges	...	...	...	...	10
„ Notices sent in respect of same	...	...	...	...	19
„ Cattle ships inspected	...	...	...	...	29

COMMON LODGING HOUSES.

No. registered under the Public Health Act	...	...	...	...	4
No. of day and night inspections	...	...	...	...	64
„ informations laid in respect of infringements	...	...	...	...	—
„ Convictions	...	...	...	...	—

SUB-LET HOUSES.

No. of Houses on Sub-let Register	207
„ Day and night inspections	5,521
„ Infringements of Sub-let Bye-laws	235

STEPS TAKEN TO PREVENT SMOKE NUISANCE.

No. of Observations made	216
„ Notices served in respect of excessive black smoke...	10
„ Informations laid in default of compliances with notices	—
„ Informations laid in default of compliance with Order	—
Amount of Fines and Costs	—

DAIRIES, COWSHEDS AND MILKSHOPS.

No. of Milkshops on Register	36
„ Shippons with dairies attached	34
„ Inspections made	1,450

The occupiers of shippons and milkshops have from time to time been verbally cautioned with regard to the cleanliness of the premises, the cows, and proper storage of milk.

FACTORY AND WORKSHOP ACT.

WORKSHOPS AND WORKPLACES (EXCLUDING BAKEHOUSES).

No. on Register	146
No. of visits and re-visits	533
„ Workrooms with dirty walls... ..	12
„ „ „ „ ceilings	12
„ „ „ „ floors	6
„ „ „ „ lavatories	5
„ Workrooms not properly ventilated	2
„ Workrooms found overcrowded	1
„ Defective drains and water closets	19
„ Miscellaneous defects found	48
„ Notices issued to occupiers	17
„ „ „ „ owners	50
„ Notices complied with	67
„ References to the Factory Inspector... ..	18

SHOP HOURS ACT.

No. of Shops visited by day...	...	...	...	...	196
„ „ „ „ night	...	...	...	...	52
„ Instances in which the provisions of the Act were found not to be complied with	...	...	...	...	14

BAKEHOUSES.

No. on Register	...	...	...	...	...	40
No. of Visits and Re-visits made	...	...	...	...	...	320
„ Bakehouses found dirty (walls and ceilings)	...	...	...	...	...	7
„ Notices issued for limewashing	...	...	...	...	...	7
„ Bakehouses limewashed without notice	...	...	...	...	...	33
„ Notices for defective walls and floors	...	...	...	...	...	6
„ Notices to cleanse tables, utensils, etc.	...	...	...	...	...	12
„ References to the Factory Inspector	...	...	...	...	...	2

CONFECTIONERY BAKEHOUSES.

No. on Register	...	...	...	...	...	21
„ of Visits and Re-visits made	...	...	...	...	...	84
„ found dirty (walls and ceilings)...	...	...	...	...	...	3
„ of Notices issued for limewashing	...	...	...	...	...	3
„ Notices issued for defective drainage	...	...	...	...	...	9
„ Notices issued to cleanse floors, utensils, etc.	...	...	...	...	...	5

OUTWORKERS.

No. of Outworkers on Register	...	...	...	...	25
„ Visits and re-visits made to houses of outworkers	...	...	...	...	136
„ Notices served for sanitary defects at houses of out- workers	...	...	...	...	9

[All the above notices were complied with.]

Outworkers employed in Bootle for	Tailors or Tailoresses	5
Liverpool, Birkenhead and	Dressmakers	16
Litherland Firms	Boot Repairers	3
	Laundry	1

Outworkers employed in Liverpool	{	Tailors or Tailoresses	12
for Bootle Firms	}	Boot Repairers ...	2

FOOD INSPECTION.

No. of Foodshops visited	...	...	...	...	...	1,763
Amount of food seized in small quantities and destroyed						
during the year...	...	...	...	...	...	462½ lbs.

SUMMARY OF LEGAL PROCEEDINGS.

Defective drains, etc.	...	...	...	...	...	5
Infringements of Sale of Food and Drugs Acts	...	...	...	...	...	20

DISINFECTION.

No. of Houses disinfected after notifiable infectious diseases	...	...	...	...	...	365
„ Houses disinfected after Phthisis	...	...	...	...	...	101
„ Houses disinfected after Measles	...	...	...	...	...	4
„ Schools disinfected after Scarlet Fever	...	...	...	...	...	—
„ „ „ „ Measles	...	...	...	...	...	—
„ Visits made to infected houses	...	...	...	...	...	355
„ Re-visits made to infected houses	...	...	...	...	...	1,012
„ Houses cleaned in default of owners	...	...	...	...	...	14
„ Houses disinfected from other causes than fevers	...	...	...	...	...	21

NOTE.—Since June, 1903, all houses with a rental of eight shillings per week or under, have been cleansed after infectious disease (*i.e.*, the walls stripped, and the ceilings whitened) by the Corporation, free of cost.

FILTHY HOUSES.

No. of Notices sent to cleanse the walls and ceilings of filthy						
houses	...	...	...	...	...	136
„ Notices complied with	...	...	...	...	...	119

LIST OF ARTICLES DISINFECTED.

			Bootle.	Litherland.	Formby.	Totals.
Mattresses	...	...	396	90	18	499
Beds	...	...	469	79	4	552
Bolsters and Pillows	...		1,160	233	25	1,418
Blankets	...	...	776	157	30	963
Quilts	..	...	533	116	15	664
Sheets	...	...	547	117	9	673
Carpets	...	...	294	44	6	344
Wearing Apparel	...		2,893	489	89	3,471
Miscellaneous Articles	...		691	133	12	836
			<hr/>	<hr/>	<hr/>	<hr/>
Totals	...		7,759	1,458	203	9,420
			<hr/>	<hr/>	<hr/>	<hr/>

NOTE.—These figures do not include the ambulance bedding (one bed, one pillow and three blankets), which is disinfected after the removal of each case.

The following articles were destroyed by the request of the owners, after infectious disease:—

Wearing Apparel	...	...	...	...	...	21
Mattresses	...	...	...	...	...	13
Beds	..	...	...	..	...	9
Bolsters and Pillows	...	...	...	...	...	5

FLUSHING.

The flushing gang consists of two Corporation workmen, and one Liverpool waterman.

No. of Private houses at which drains were flushed	...	12,387
„ Passage sewers flushed	...	775
„ Public buildings at which drains were flushed	...	48

The drains at the Bootle Borough Hospital were flushed 12 times during the year.

The amount of fresh water used during the year was 3,262,670 gallons.

TABLE 1.—COUNTY BOROUGH OF BOOTLE.

VITAL STATISTICS OF WHOLE DISTRICT DURING 1910 AND PREVIOUS YEARS.

YEAR.	Population estimated to Middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.					TOTAL DEATHS IN PUBLIC INSTITU- TIONS IN THE District.	Deaths of Non- residents registered in Public Institutions in the District.	Deaths of Residents registered in Public Institutions beyond the District.	NET DEATHS AT ALL AGES BELONGING TO THE DISTRICT.				
		Number.	Rate.*	3	4	5	UNDER ONE YEAR OF AGE		AT ALL AGES.				Number.	Rate.*			
							Number.	Rate per 1,000 Births registered.	Number.						Rate.*		
	2									6	7	8	9	10	11	12	13
1900.	57,450	1,827	31.8	373	204	1,156	20.1	91	35	120	1,241	21.5					
1901.	58,556	1,837	31.4	337	183	965	16.4	82	34	123	1,054	18.0					
1902.	60,000	1,949	32.4	302	154	1,043	17.0	101	37	155	1,162	19.3					
1903.	60,800	2,010	33.5	325	161	1,015	16.6	113	39	163	1,139	18.6					
1904.	62,000	1,918	30.9	346	180	1,051	16.9	85	32	160	1,179	19.0					
1905. Borough	63,134	2,079	32.9	321	153	983	15.5	109	33	188	1,138	19.0					
1906.	68,000	2,171	31.9	312	143	1,039	15.2	89	33	203	1,209	17.7					
1907.	69,200	2,168	31.3	268	123	992	14.3	92	39	175	1,128	16.3					
1908.	70,500	2,182	30.9	314	143	1,078	15.2	95	41	188	1,225	17.3					
1909.	71,500	2,138	29.9	251	117	989	13.8	93	26	142	1,148	16.0					
Averages for years 1900-1909.	64,114	2,027	31.6	314	154	1,031	16.0	95	34	161	1,162	18.1					
1910.	72,000	2,016	28.0	243	120	872	12.1	109	38	185	1,019	14.1					

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres, exclusive of area covered by water—1,946 at present.

Total Population at all ages, 58,556; number of inhabited houses, 10,044; average number of persons per house, 5.8—at census of 1901.

The Union Workhouse is not within the District.

TABLE 2.—COUNTY BOROUGH OF BOOTLE.

VITAL STATISTICS OF SEPARATE LOCALITIES IN 1910 AND PREVIOUS YEARS.

NAMES OF LOCALITIES	THE WHOLE BOROUGH				DERBY WARD				STANLEY WARD				MERSEY WARD				KNOWSLEY WARD				LINACRE WARD				ORRELL WARD					
	Population esti- mated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population esti- mated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population esti- mated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population esti- mated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population esti- mated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population esti- mated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year	Population esti- mated to middle of each year	Births registered	Deaths at all Ages	Deaths under 1 year		
YEAR																														
1900 ..	57,450	1,827	1,241	373					11,107	288	148	49	13,113	385	317	92	12,245	417	264	83	11,881	379	160	61						
1901 ..	58,556	1,837	1,054	337					11,381	264	150	36	13,417	451	338	96	12,548	416	276	58	12,192	440	226	69						
1902 ..	60,000	1,949	1,162	302					11,533	273	173	58	13,596	445	287	73	12,715	469	279	76	12,354	451	215	65						
1903 ..	60,800	2,010	1,139	325					11,184	264	160	46	13,973	427	348	95	11,578	424	281	79	13,388	428	192	68						
1904 ..	62,000	1,918	1,179	346					11,391	297	183	48	14,224	429	295	75	11,791	422	223	55	13,632	479	216	75						
1905 ..	63,134	2,079	1,138	321																										
Borough Extended																														
1906 ..	68,000	2,171	1,209	312					11,572	293	146	35	14,455	406	279	72	11,981	397	269	62	13,853	498	250	76			3,850	149	50	15
1907 ..	69,200	2,168	1,128	268					11,687	249	144	23	14,577	377	260	62	12,177	430	238	57	14,213	528	240	61			3,943	145	55	21
1908 ..	70,500	2,182	1,225	314					11,906	278	152	31	14,851	415	304	83	12,406	381	260	61	14,480	497	266	66			4,017	142	54	22
1909 ..	71,500	2,138	1,148	253					12,075	257	142	28	15,060	394	295	73	12,596	372	205	48	14,685	541	231	46			4,074	159	47	7
	64,114	2,027	1,162	315					11,537	273	155	39	14,140	414	302	80	12,226	414	255	64	13,408	471	221	65			3,971	148	51	16
	Average of years 1900 to 1909				Average of years 1901 to 1909				Average of years 1901 to 1909				Average of years 1901 to 1909				Average of years 1901 to 1909				Average of years 1906 to 1909									
1910 ..	72,000	2,106	1,019	249					12,160	224	123	18	15,156	350	237	65	12,684	365	200	39	14,788	498	222	53			4,102	138	40	17

TABLE 3.—COUNTY BOROUGH OF BOOTLE.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1910.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						TOTAL CASES NOTIFIED IN EACH LOCALITY.						NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.						Total cases removed to Hospital.
	At all Ages.	At Ages—Years.					Derby Ward.	Stanley Ward.	Mersey Ward.	Knowsley Ward.	Linacre Ward.	Orrell Ward.	Derby Ward.	Stanley Ward.	Mersey Ward.	Knowsley Ward.	Linacre Ward.	Orrell Ward.	
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.														65 and upwards.
Small-pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria (including Mem- branous Croup)	54	—	17	32	4	1	25	7	7	7	3	5	19	6	6	5	1	2	39
Erysipelas	26	1	—	—	2	21	7	1	5	5	7	1	—	—	—	—	—	—	—
Scarlet Fever	288	4	78	175	18	13	89	41	27	37	72	22	61	30	14	23	60	13	201
Typhus Fever...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fever	12	—	1	2	6	3	4	1	4	1	2	—	4	—	1	1	—	—	6
Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Continued Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Puerperal Fever	2	—	—	—	—	2	1	—	1	—	—	—	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phthisis	123	—	2	16	25	76	15	17	30	30	22	9	—	—	—	—	—	—	—
Totals	505	5	98	225	55	116	141	67	74	80	106	37	84	36	21	29	61	15	246

Corporation Infectious Diseases Hospital, Linacre Lane, Bootle.—Total available beds 122. Number of Diseases that can be concurrently treated, 5.

TABLE NO. 4.—COUNTY BOROUGH OF BOOTLE.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1910.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICT AT SUBJOINED AGES.							DEATHS IN LOCALITIES (AT ALL AGES).						TOTAL DEATHS WHETHER OF "RESIDENTS" OR "NON-RESIDENTS" IN PUBLIC INSTITUTIONS IN THE DISTRICT.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Derby Ward.	Stanley Ward.	Mersey Ward.	Knowsley Ward.	Linacre Ward.	Orrell Ward.	
Small-pox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles ...	22	8	12	1	—	1	—	8	2	2	3	6	1	—
Scarlet Fever ...	6	1	3	1	1	—	—	1	—	1	—	3	1	5
Whooping Cough ...	32	12	18	2	—	—	—	4	6	6	6	9	1	—
Diphtheria including Membranous Croup ...	6	—	4	2	—	—	—	3	—	2	1	—	—	7
Croup ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fever { Typhus ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
{ Enteric ...	2	—	—	—	2	—	—	—	—	—	1	1	—	—
{ Other Continued	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Epidemic Influenza ...	3	—	—	—	—	3	—	2	—	1	—	—	—	—
Cholera ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Plague ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diarrhœa ...	64	37	22	1	—	2	2	10	6	12	20	13	3	1
Enteritis ...	13	6	5	—	—	2	—	2	1	3	2	5	—	2
Gastritis ...	8	8	—	—	—	—	—	3	—	1	—	3	1	—
Puerperal Fever ...	1	—	—	—	—	1	—	1	—	—	—	—	—	—
Erysipelas ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phthisis (Pulmonary) ...	83	—	1	5	18	53	1	10	16	19	14	19	5	1
Other Tubercular Diseases	31	6	12	9	3	1	—	3	3	6	7	12	—	3
Cancer, Malignant Disease	53	—	1	—	—	39	13	15	9	8	7	14	—	1
Bronchitis ...	99	16	9	—	1	43	30	15	11	33	19	16	5	2
Pneumonia ...	101	22	24	6	1	35	13	18	7	21	20	28	7	12
Pleurisy ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Diseases of Respiratory Organs	12	—	1	1	1	6	3	1	3	3	2	2	1	—
Alcoholism	7	—	—	—	—	6	1	2	1	2	1	—	1	1
Cirrhosis of Liver	2	1	—	—	—	1	—	—	—	1	—	1	—	—
Venereal Diseases	44	44	—	—	—	—	—	13	5	10	4	10	2	—
Premature Birth ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diseases and Accidents of Parturition ...	7	—	—	—	1	6	—	1	—	1	3	1	1	1
Heart Diseases ...	70	1	1	2	2	39	25	21	12	12	12	13	—	3
Accidents ...	27	3	3	3	3	13	2	7	3	6	7	4	—	23
Suicides ...	1	—	—	—	1	—	—	1	—	—	—	—	—	1
Marasmus ...	31	23	8	—	—	—	—	3	4	12	7	4	1	4
Convulsions ...	24	19	5	—	—	—	—	5	1	10	2	5	1	1
Other Septic Diseases	5	1	1	1	1	1	—	—	—	3	1	1	—	3
Senile Decay ...	43	—	—	—	—	2	41	7	8	6	11	8	3	—
Not Certified ...	36	20	1	—	1	9	5	7	3	13	6	7	—	—
All other Causes ...	186	21	11	12	3	99	40	33	22	43	46	36	6	38
All causes ...	1019	249	142	46	39	367	176	196	123	237	202	221	40	109

TABLE 5.—INFANTILE MORTALITY DURING THE YEAR 1910.

Deaths from Stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under One Year.
All Causes	Certified	42	8	13	12	75	21	19	18	16	9	13	12	8	10	12	16	229
	Uncertified	9	—	2	1	12	1	3	1	—	3	—	—	—	—	—	—	20
Common Infectious Diseases	Small-pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Chicken-pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Measles	—	—	—	—	—	—	—	—	—	—	—	1	—	—	4	3	8
	Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Diarrhoeal Diseases	Diphtheria (including Membranous Croup)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Whooping Cough	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Diarrhoea, all forms	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Enteritis, Mucro-enteritis, Gastro-enteritis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Wasting Diseases	Gastritis, Gastro-intestinal Catarrh	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Premature Birth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Congenital Defects	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Injury at Birth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculous Diseases	Want of Breast-milk, Starvation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Atrophy, Debility, Marasmus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Tuberculous Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Tuberculous Peritonitis: Tubes Mesenterica	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Causes	Other Tuberculous Diseases	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Erysipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Syphilis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Rickets	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Causes	Meningitis (not Tuberculous)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Convulsions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Bronchitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Laryngitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Causes	Pneumonia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Suffocation, overlying	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Other Causes	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Not Certified	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total		51	8	15	13	87	22	22	19	16	12	13	12	8	10	12	16	249

Births in the year—Legitimate, 1,971; Illegitimate, 45.

Population, estimated to middle of 1910, 72,000.

Deaths from all Causes at all ages, 1,019.

Deaths in the year of { legitimate infants ... 235
illegitimate infants ... 14

Table showing the number of deaths in each street during each month of the year.
1910.

LOCALITIES.	JAN.	FEB.	MAR.	APRIL.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.	
	Un- der 1	1 and up.											Un- der 1	1 and up.
Aber Street	1	1	...	...	1	...	1	1	...	2	6
Addison Street	2	...
Aintree Road	3	...
Akenside Street	1	...	...	...	...	...	2	...	...	...	1	4
Albany Place
Albert Drive
Alexandra Drive
Alma Vale Terrace	1	...	...	1
Alt Road	1	...	1	...	...	...	...	...	...	1	...	1	2
Altcar Road	1	...	...	...	...	...	...	...	...	...	...	1
Ampton Place
Annic Road
Antonio Street
Armstrong Street.	1	1	2	1	1	1	1	1	1	1	...	...	5	6
Arctic Road	1	...	...	...	...	...	1	...
Arvon Street	1	...	1	...	...	...	...	...	1	1
Ash Street.	...	1	...	...	1	...	...	...	...	...	1	...	1	4
Ashcroft Street	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Atlantic Road
Atlas Road	...	2	...	...	1	...	1	1	3	...	...	1	1	11
Audley Street	1	...	...	...	...	...	...	...	1	...	...	...
Aughton Road
August Street
Bala Street	1	...	...	1	...	1	1	...	...	...	...	2	1	5
Balfour Avenue	1	...	...	...	...	...	...	1	...
Balfour Road
Balliol Road	1	...	...	...	...	...	...	...	...	...	...	...	1	...
Balliol Terrace	1	...	...	...	...	...	...	...	...	2	...	...	...	3
Baltic Road
Bangor Street	...	1	...	...	...	2	2	...	...	...	...	...	5	...
Bank Road	1	...	...	...	1	1	...	2	...	2	4
Beatrice Street	...	2	...	...	...	...	1	1	...	...	...	1	2	...
Beatrice Street	...	2	...	...	1	...	1	...	...	1	...	...	2	8
Beatrice Street	2	7	4	2	2	1	2	3	6	1	4	1	25	66
	2	7	3	3	5	1	6	3	2	5	5	9	91	91

LOCALITIES.	JAN.		FEB.		MAR.		APRIL.		MAY.		JUNE.		JULY.		AUG.		SEPT.		OCT.		NOV.		DEC.		TOTAL.	
	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.	Un- der 1	1 and up.
Beck Road	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Benedict Street	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bedford Place	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bedford Road	..	1	..	1	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Beech Street
Benbow Street
Bennett Street
Beresford Street...	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Berry Street	..	1	..	1	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Berwick Road
Bianca Street
Bibby's Lane	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blair Street	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blake Street
Blossom Street
Boreland Street	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Boston Street	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Boswell Street	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bowles Street	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brasenose Road	..	1	..	2	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Breeze Hill
Brewster Street
Bridge Street
Bridle Road
Brocklebank Dock
Brook Road	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brookhill Road	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Browne Street	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Browning Street	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bullen's Terrace	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bulwer Street
	3	15	5	15	11	6	14	4	14	6	15	6	21	11	13	6	16	2	9	8	16	10	21	75	181	256

LOCALITIES.	JAN.	FEB.	MAR.	APRIL.	MAY	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.														
	Un- der 1 up.												Un- der 1 up.														
Burns Street	1	...	1	1	...	...	...	...	...	1	...	1	5									
Byng Street	...	1	...	2	...	...	1	...	...	...	...	...	4							
Byron Street	5														
Cambridge Road	2	...	...	1	...	...	...	1	...	1	3									
Camden Street	1	...	...	1	...	...	...	...	...	...	3						
Campbell Street	1	1	1	...	...	...	...	...	...	...	1	...	4							
Canal Street	2	1	...	1	1	...	2	...	1	...	7														
Canal View	1	1														
Captain's Lane														
Carolina Street	...	1	...	...	...	...	...	...	...	...	...	...	...			
Cedar Street	1	...	1	...	1	...	...	...	...	1										
Chapel Street	1	1	...	1	...	...	...	...	...	...	2								
Chaucer Street	1	1	...	...	...	...	...	...	1	...	1								
Chesnut Grove	1	...	...	1	...	...	1	...	3										
Church Road	2	...	...	...	...	...	4									
Church Street	...	2	1	...	...	...	...	...	...	...	...	...	4					
Church View	1	...	...	...	...	...									
Cinder Lane	1	...	1	...	...	...	...	...									
Clare Road	...	1	1	1	...	...	1	1	...	1	...	1	4												
Clifford Street	1	...	...	...	1	1	...	1	...	...	2									
Coleridge Street														
College View	1	...	...	...	...	...	...								
Collins Street	1	1	...	...	...	3	4											
Concord Place	1	...	...	...	...	...									
Conway Street	1	...	...	1	...	2												
Cornwall Street	1														
Cowper Street	1	...	...	...	1	...	1	...	...	1	...	3	5									
Cranworth Street	1														
Crete Street	1	...	...	...	...	...	...	...	...	...	1					
Cross Terrace														
Cross Street, No. 2														
	3	18	6	20	13	22	4	20	4	16	7	20	10	28	15	18	8	19	4	14	9	22	12	26	95	243	338

LOCALITIES.	JAN		FEB.	MAR.	APRIL.		MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.												
	Un- der 1.	1 up.			Un- der 1	up.																					
Falconer Street	1	...	...	...	1	...										
Fernhill Road	1	...	...	...	...	1										
Fire Station	1	...	...	...	...	1										
First Street	1	...	...	...	...							
Flint Street	2	...	...	...	...	...	...	...	...	...	...	
Florida Street	1	...	...	...	...	...	...	...	...	...	...	
Formby Place											
Garden Lane	1	...	...	...	...	...	...	...	...	...	...	
Garfield Street	1	...	...	...	...	1	...	...	...	...	...	...	...	2	...	
Girton Street											
Globe Road											
Gloucester Road...	1	...	...	...	...	...	...	...	...	2	...	...	...	...							
Glynn Street											
Goldsmith Street...											
Gonville Road											
Gower Street											
Gray Street	1	...	...	...	1	...	...	...	...	...	...	...	...	...		
Grimshaw Street...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Grove Street											
Halsall Road											
Hamlet Street	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hatfield Road											
Hawthorne Road..	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hemans Street	2	...	...	...	...	...	...	...	...	...	...	
Hemer Place											
Hemer Terrace	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Henry Street											
Hermitage Grove											
Hertford Road											
Hero Street											
	4	22	8	33	17	37	9	27	5	23	16	29	11	39	24	29	12	34	7	22	12	32	14	34	139	360	499

LOCALITIES.	JAN.	FEB.	MAR.	APRIL.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.
	Un- der and up												Un- der and up.
Holly Street	1	..	..	1	..	..	..	..	..	..	1
Holywell Street	1	1	...	..	..	1
Hood Street	1	..	..	..	..	..	..	..	..	4
Hooton Place ..	1	..	..	1	..	1	..	..	..	..	..	..	1
Hornby Boulevard	2
Hornby Avenue
Hornby Road	4	..	..	..	..	..	..	..	..	9
Hornby Road ..	1	1	2	..	..	4	1	1	1	..	..	2	6
Howe Street	1	..	..	1	..	..	..	..	1
Humphrey Street	2
Ibstock Road	1	..	..	..	..	..	..	1	..	..	..	1
Irlam Road ..	1	1	..	..	..	..	..	..	2	..	2	..	5
Ivanhoe Street	1	..	..	..	..	..	..	2
Jersey Street	1	..	..	1
Johnstone Street	1	1	1	..	3	..	..	..	6
July Street
June Street	1	..	..	..	..	..	..	1
Kents Street	2	1	1	..	..	..	..	1	..	2
Keble Road	1	..	1	..	..	1	1	..	1	..	4
Kenilworth Street	1	1	..	..	..	..	..	..	5
Kent Street	1	1	..	..	..	2
Keppel Street	1	..	..	..	1
Kings Road	1	..	..	..	..	..	..	..	..	1	..	..
Kipling Street	2	..	1	..	1	..	1	..	..	..	..	2
Kirby Place	1	..	..	1	1	..	..	..	..	..	..	5
Kirkby Street	1	1	..	..	..	1	1	1	2	..	2	4
Kirkby Road	1	..	..	..	10
Knowsley Road ..	1	1	..	1	..	1	1	1	1	..	..	1	3
Laburnum Place	1	..	1	..	..	..	2
Lamb's Terrace
	7	27	10	43	7	23	38	26	13	9	14	39	162
	608	446	31	39	35	44	44	35	43	31	38	44	446

LOCALITIES.	JAN.	FEB.	MAR.	APRIL	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.
	Un- der 1 up.												Un- der 1 up.
Lanark Road	..	..	..	..	..	..	..	..	..	..	..	..	..
Lancaster Road	..	..	..	..	..	..	..	..	..	..	..	..	..
Langdale Street	..	..	..	..	..	..	..	..	..	..	..	..	..
Lathom Road	..	..	..	..	1	..	..	..	..	..	..	..	1
Leicester Road	..	..	..	..	1	..	..	..	..	..	..	1	1
Linacre Lane	..	..	..	..	..	..	..	..	..	..	..	..	1
Lincoln Street	..	..	..	1	1	1	..	1	1	..	2	..	6
Litherland Road..	..	1	2	1	..	3	..	2	2	3	1	1	14
Longfellow Street	..	..	..	..	..	1	..	1	..	..	..	..	1
Lunt Road	..	..	..	..	1	..	..	..	..	..	1	..	3
Lydiat Road	..	..	..	..	..	..	..	..	..	..	..	1	1
Lyster Road	..	..	..	..	..	..	..	..	..	..	..	..	..
Malcolm Street	..	..	..	..	..	..	..	..	..	..	1	..	1
Malta Road	..	..	..	..	..	..	..	..	..	..	..	..	..
Malvern Road	..	..	..	..	..	..	1	..	..	..	..	..	..
Mann Street	1	..	1	1	1	..	..	..	..	1	..	..	4
Marion Road	..	..	..	3	..	..	..	..	..	1	..	..	2
Markfield Road	..	..	1	..	1	1	..	1	2	1	2	..	5
Marsh Lane	..	2	1	..	..	1	..	1	..	..	..	..	6
Marsh View	..	..	..	..	..	..	..	..	..	..	..	2	12
Mary Road	..	1	..	..	..	1	..	..	..	..	..	..	..
Matthew Street	1	1	..	..	1	..	..	1	1	..	..	..	2
May Street	..	..	..	..	..	..	..	..	..	..	2	..	3
Melling Road	..	..	..	..	..	..	..	..	..	..	..	..	2
Merton Road	..	..	1	..	..	1	1	1	..	..	..	..	..
Merton Grove	..	1	..	..	..	..	..	..	..	..	1	..	4
Middlesex Road..	..	..	1	..	..	..	1	..	..	..	..	..	2
Mildmay Road	..	..	..	..	..	..	..	..	..	..	..	..	2
Mill Lane	..	..	..	..	..	..	1	..	..	..	1	..	2
Miller's Bridge	..	..	1	..	..	..	..	1	..	..	1	..	3
Milton Street	..	1	..	..	..	..	..	..	1	..	..	..	4
Miranda Road	..	..	3	..	..	..	..	..	..	..	..	..	..
..	9	33	22	42	9	45	12	41	14	37	15	43	188
..	10	49	52	12	34	27	48	28	49	49	40	16	1522
..	9	33	22	42	9	45	12	41	14	37	15	43	188
..	10	49	52	12	34	27	48	28	49	49	40	16	1522
..	9	33	22	42	9	45	12	41	14	37	15	43	188
..	10	49	52	12	34	27	48	28	49	49	40	16	1522
..	9	33	22	42	9	45	12	41	14	37	15	43	188
..	10	49	52	12	34	27	48	28	49	49	40	16	1522
..	9	33	22	42	9	45	12	41	14	37	15	43	188
..	10	49	52	12	34	27	48	28	49				

LOCALITIES.	JAN.	FEB.	MAR.	APRIL.	MAY.	JUNE	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.												
	Un- der 1 up												Un- der 1 up.												
Molyneux Street..	..	1	..	..	1	1	2	..	1	..	1	..	1										
Mona Street ..	..	..	..	..	1	..	..	..	..	..	1	..	6			
Monfa Road ..	..	..	..	..	..	..	..	..	..	..	1	..	2		
Moore Street ..	..	1	..	..	1	..	1	..	..	1	2	..	6							
Morningside Road	..	..	..	..	..	..	..	..	..	..	..	..	..
Moss Lane ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mount Avenue ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Napier Street ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nelson Street ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Netherton Road ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nevada Street ..	2	1	..	..	..	..	..	1	..	..	..	..	3			
Norfolk Street ..	..	..	..	..	..	..	1	..	..	..	..	..	2	
Northfield Road ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Norton Street ..	1	1	..	1	..	..	1	..	..	..	1	..	4							
Oak Street ..	..	..	..	..	..	2	..	1	..	2	2	1	1							
Olivia Street ..	2	2	2	1	1	..	1	..	..	..	..	..	14							
Oregon Street ..	1	..	..	1	1	..	1	..	..	2	..	..	6						
Oriel Road ..	..	..	..	..	..	..	..	..	1	..	..	1	2		
Orlando Street ..	..	2	2	1	..	..	..	..	..	..	..	..	6			
Orrell Lane ..	1	1	..	..	..	..	..	..	..	..	..	..	1		
Orrell Road ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Oxford Avenue ..	..	..	..	..	..	..	..	..	..	..	..	..	2
Oxford Road ..	..	1	..	..	..	..	1	..	..	..	..	..	..						
Pacific Road ..	..	..	..	..	..	..	1	..	..	..	..	..	1	
Park Grove ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Park Lane..	..	..	..	..	..	..	..	..	..	..	..	..	..
Park Place ..	..	..	..	..	..	..	..	..	1	..	..	1	1		
Park Street ..	1	..	1	..	..	..	..	..	..	4	..	..	7				
Peel Road..	..	1	..	..	1	..	..	..	1	..	1	1	4							
Pembroke Road..	..	..	..	..	..	..	..	..	..	..	..	..	..
	9	41	59	22	57	13	44	10	40	27	48	13	55	29	43	14	52	47	18	56	17	47	201	589	790

LOCALITIES.	JAN.	FEB.	MAR.	APRIL.	MAY	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.														
	Un- der 1 up.												Un- der 1 up.														
Percy Street	1	...	1	...	1	...	...	...	...	1										
Pine Grove	3														
Pleasant Grove	1	...	...	...	1	...	...	...	...	1	...	1							
Pleasant Place	2														
Pleasant Street														
Pleasant View	1	...	...	...	...	...									
Pope Street	1	1	...	...	...	...	...	1									
Princes Street	1														
Prior Street ..	1	...	...	...	1	...	...	...	...	...	...	...	2				
Province Road	1	...	...	...	...	...	...	...	...	...	2					
Quarry Road														
Queen's Road	1	...	1	...	...	1	...	...	...	5									
Raleigh Street	1	...	...	...	...	1										
Recreation Street	1	...	...	...	...	1										
Regent Road	1	...	...	2												
Rhyl Street	1	...	...	...	...	...	1									
Richmond Grove..	2														
Rimrose Road	3														
Roby Street ..	1	...	...	1	...	1	...	1	...	...	3	...	7										
Rodney Street	1	...	...	...	...	...	...	...	1							
Rufford Road														
Rutland Street	1														
St. Alban's Road..	1	...	...	...	...	1	...	...	...	...	3						
St. Alban's Square														
St. Andrew's Road	1	...	...	...	...	...	...	...	...	1	...	2						
St. Catherine's Road	1	...	...	...	...	...	...	...	...	1	1						
St. Edmond's Road	1														
St. John's Road	1	1	...	1	...	1	...	1	...	1	...	8														
St. John's Terrace	1														
Sandfield Place	1														
	11	51	16	61	22	63	16	47	11	43	27	53	14	58	34	49	15	53	16	49	19	61	18	52	219	640	859

LOCALITIES.	JAN.		FEB.	MAR.	APRIL.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.	TOTAL.												
	Un- der	1 up.												Un- der	1 up.											
Sandy Lane	1	..	..	..	1	..	1									
Salisbury Road	..	1	..	..	..	..	..	..	..	..	..	..	1	..	3	1
Scott Street	1	..										
Seafeld Road	1	..	..	..	..	..	..	..	..	..	..
Seaview Road	2	1										
Second Street	1	..	..	..	..	1	11									
Seaforth Street	..	4	1	..	..	1	1	..	..	..	2	..	..	..	..	..					
Sefton Road										
Seymour Street										
Shakespeare Street										
Shelley Street	1	..	1	..	..	2	..	..	1	..	2	4	4						
Sheridan Place	1	..	..	..							
Shore Road	1	..	..	..	..	..					
Sidney Road	..	1	1	..	1	..	..	..	..	..	..	..	..	..	4	2	
Smollett Street	1	..	..	1	..	..	..	..	..	2	1					
Smyrna Road	1	..	..	..	..	..	1	..	..	3	2					
Southern Street	..	1	..	..	1	2	..	1	..	1	..	1	..	2	3	2								
Somerset Road										
Speke Place										
Spenser Street	2	1	1	1	..	..	..	..	1	4						
Spring Grove	1	1	..	1	..	..	..	..	2	1						
Springwell Road	1	..	..	..	1	1										
Stafford Street	1	..	..	..	1	..	..	..	..	1	2					
Staley Street	1	..	1	1	..	..	..	1	..	..	..	1	2	2				
Stanley Road	1	1	1	..	3	..	1	1	..	3	..	..	1	1	1	11								
Strand Road	2	..	1	..	1	..	..	1	..	..	..	..	..	7			
Suffolk Street										
Summerset	1	..	..	1	..	..	..	1	1	1						
Surrey Street										
Sussex Street										
Talbot Street	1	..	1	..	..	..	..	..	..	..	2	2				
Tattersall Place	1	..	..	..	..	1	1									
	12	59	16	68	22	68	17	50	12	51	30	57	14	63	58	20	61	20	53	21	65	18	57	237	710	947

